A GUIDE TO THE MEDIAEVAL ROOM

AND TO THE SPECIMENS OF
MEDIAEVAL AND LATER TIMES
IN THE GOLD ORNAMENT ROOM



Plate I. Ivory Statuette of the Virgin and Child, Fourteenth Century.

Frontispiece.

BRITISH MUSEUM

A GUIDE

TO THE

MEDIAEVAL ROOM

AND

TO THE SPECIMENS OF MEDIAEVAL AND LATER TIMES IN THE GOLD ORNAMENT ROOM

WITH FOURTEEN PLATES AND A HUNDRED AND NINETY-FOUR ILLUSTRATIONS

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PREFACE

The present Guide deals only with such remains of mediaeval and later times as the arrangement of the Museum allows to be exhibited as a whole. Manuscripts, coins and medals, prints and drawings, are to be found, as in all great museums, in separate departments, while ceramics and glass also form an independent section. These reasons alone deprive the collections here described of any claim to a fully representative character, and the absence, either in original or reproduction, of architectural and monumental sculpture, imposes a further and more serious limitation, for in these branches of art the inspiration of the Christian religion created the greatest monuments produced since classical times. The restriction of a collection to objects of comparatively small size must necessarily diminish its educative value; while the inclusion within the period which it represents of phases of culture with very different aims and methods has an equally adverse effect. There is the further difficulty that the objects range from fine examples of religious art to the implements and utensils of common life. Their exceedingly miscellaneous nature renders them by no means easy to treat as a whole, while they suggest or express the most diverse customs and the most irreconcilable beliefs. The ideals of the thirteenth and eighteenth centuries, for example, are so far apart, that a collection which includes the two, together with all intervening periods, will not admit the same unity in description as one concerned with a single country or a more homogeneous art.

In view of these various obstacles to any complete and consecutive treatment, it has been considered most practical to divide this small book into two parts, one describing the

contents of the cases, the other forming an alphabetical glossary, in which an attempt has been made to furnish a certain number of facts on the various classes of objects exhibited. In a task of this kind much that is of interest has unavoidably been omitted, and it has not been easy to assign to the different sections the space befitting their relative importance. The method of arrangement is experimental, and can only be judged by the extent of its practical utility.

All idea of prefixing an introduction dealing with the general conditions of life in the periods represented has also been necessarily abandoned. As it is, the size of this Guide has exceeded that of those previously issued by the Department. But even had space been available, the task of attempting to explain, within a few pages, the conditions affecting the development of the industrial arts not merely in the Middle Ages, but also in the Renaissance and later periods, is one which could hardly be attended with success. Yet in the Middle Ages the industrial arts were connected on so many sides with the whole life of the community, that a little general knowledge is indispensable to their comprehension. To be familiar even in a slight degree with the social and religious institutions, the geography and commerce of the Middle Ages; to know even a little of the rudiments of architecture and heraldry, and the literature of romance, is to possess the key to many secrets of mediaeval art which must otherwise remain unintelligible. It is fortunate that the absence of such information from these pages is a less serious drawback at the present than it would have been at any previous time; for recent years have witnessed the publication of many excellent and accessible works by the help of which the beginner may easily lay the necessary foundations and the more advanced student enlarge the limits of his knowledge.

The Department of British and Mediaeval Antiquities only came into existence in the year 1866, some twenty years after the study of mediaeval works of art had taken a definite

place as a branch of archaeology. At that time the South Kensington Museum had formulated a scheme for collecting objects of art in the hope of improving industrial art in this country. This scheme, however, was limited to objects which were desirable from the point of view of art alone; and specimens of which the interest was chiefly archaeological or historical were naturally excluded. There is thus a difference between the principles of acquisition at Bloomsbury and at South Kensington. For while an art collection is limited to artistic objects, an archaeological collection is not necessarily confined to those which are inartistic. The examples to be found in an archaeological museum may have artistic value or may have none, so long as their presence serves to illustrate the lines on which civilization has progressed; they are not collected as things of beauty, but as documents illustrating stages of culture. Thus the British Museum aims less at a complete representation of mediaeval and later art than at filling the interval between the culture of classical and modern times. Though the primary object is thus historical rather than artistic, it cannot be attained without the inclusion of objects possessing artistic merit; and therefore some overlapping of the collections in our two national museums is unavoidable in practice. A similar state of affairs prevails in other great capitals, where despite apparent inconsistencies it is felt to have compensating advantages. For it is not desirable that the beautiful and the merely useful things of the same age and country should everywhere be systematically kept apart.

It will be found that the collections described in this Guide vary considerably in completeness. In the sections of ivory carvings, seal-matrices, and watches, the series are sufficiently large to furnish a fair idea of the condition of the respective arts during mediaeval and later times; but in other sections, notably those illustrating the habits and daily life of the periods, there are many gaps which the future may see partially filled.

The principal benefactors to the Mediaeval Collection are

Lady Fellows, William Burges, A.R.A., John Henderson, General Meyrick, Octavius Morgan, and Sir A. Wollaston Franks, K.C.B., the late Keeper of the Department. The bulk of the valuable bequest of the last-named is to be found in the Gold Ornament Room and the corridor leading to it.

This Guide has been written under my direction by Mr. O. M. Dalton, the senior assistant in the department.

The Trustees are indebted to the Council of the Society of Antiquaries of London for blocks of figs. 54, 59 and 194, and of plate XIII.

CHARLES H. READ, Keeper,
Department of British and Mediaeval
Antiquities and Ethnography.

March, 1907.

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DESCRIPTION OF CASES.

WALL-CASES 1–9.

ARMS AND ARMOUR. (See pp. 57–65.)

Cases 1–3. Swords and daggers, those to the left (fig. 1) mediaeval, those to the right of later date; crossbows of the sixteenth century (fig. 61), one inlaid with ivory; windlass for drawing a crossbow; sword of the fourteenth century with inscribed blade, found in the river Witham (fig. 55); German hand-mortar of the sixteenth century inlaid with ivory (fig. 62); wheel-lock pistol dated 1607 (fig. 62); war-maces; sword-pommels of various dates (fig. 56). On lower shelf: specimens of chain mail. In bottom of case: halberds, partisans, pikes, &c.

On the wall above the case, front of a leaden cistern of the eighteenth century from old Montague House, which was the first British Museum.

Cases 4–5. On the upper shelves: helmets of the fourteenth to sixteenth centuries, the oldest from Kordofan (fig. 2). In the middle: German breastplates and cuisses of the sixteenth century, tilting gauntlet, arm of a fluted suit, and rectangular steel buckler of the fifteenth century. Bottom of the cases: pikeman's armour of the time of Charles I; garde-de-reins for a horseman of the sixteenth century; series of spurs (figs. 57 and 58).

Cases 6–7. Back: shields of parade of the fifteenth century (p. 63 and fig. 60); circular Italian buckler of the same century. Middle shelf: damascened helmet; embossed buckler; French engraved morion of the late sixteenth century; part of a German gauntlet fourteenth century; engraved gussets; portions of skirt; cuisses; and placatte, or lower part of a splinted breastplate, all German of the sixteenth century. At the bottom: brigandine and jazerine jackets of the fifteenth and sixteenth centuries; head-piece of brigandine armour (fig. 59); powder-flasks.

Cases 8–9. On the top shelves: head-pieces of the sixteenth and seventeenth centuries, including a spider-helmet, a morion, and an English pikeman's steel cap of about 1620 (fig. 2).

At the back: portion of a linen trapping with appliqué arms of William De Fortibus, 3rd Earl of Albemarle (d. 1260), and his wife Isabella de Redvers, Countess of Devon. 'Standard' or collar of mail, of the fifteenth century (fig. 3); part of a fluted suit

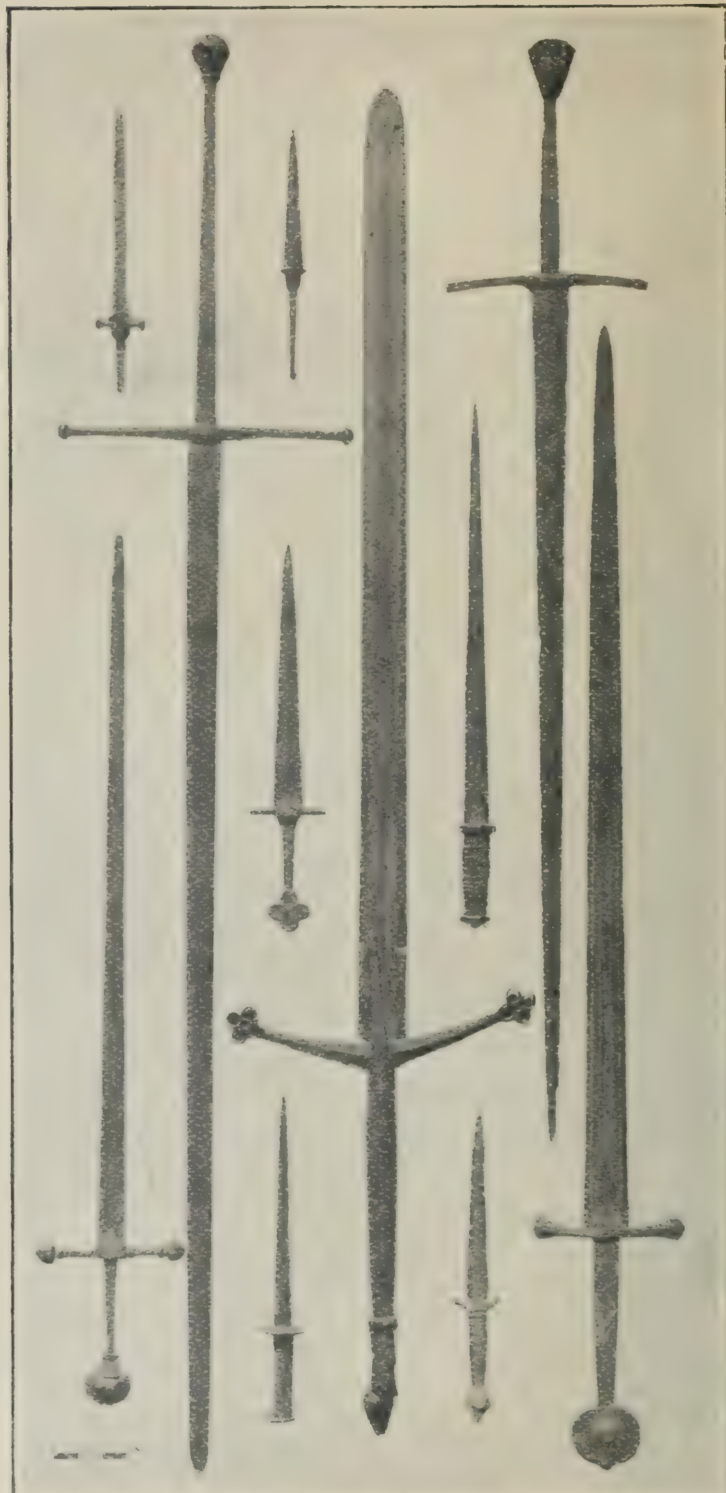


Fig. 1.—Swords and daggers.

said to have belonged to a king of Poland, German work of the sixteenth century, cuirass and gorget of scale armour, with fluted helmet, Polish, early seventeenth century; fluted gauntlets; two small models of complete suits, probably French, of the beginning of the seventeenth century (plate IV).

In the bottom of the cases: fluted cuisses; square-toed sollerets, German, early sixteenth century; Italian armourer's



Fig. 2.—Helmets, fourteenth to seventeenth centuries.

pincers and anvil, with figures of saints in relief, sixteenth century; head-piece worn by deer-hunters in England in the eighteenth century; series of stirrups (fig. 179).

TABLE-CASE A.

South Side (facing the middle of the room).

Left division: English enamelled copper plates, one a stall-plate of Sir William Parr, brother of Queen Catherine Parr, as Knight of the Garter, probably broken on the occasion of his attainder in 1553; another a garter-plate with arms of Sir Anthony Browne (sixteenth century); a third, dated 1537, with

the arms of Sir Edward Seymour, Earl of Hertford, afterwards Duke of Somerset and Lord Protector (fig. 97); coffin-plate of Mary of Modena, queen of James II (d. 1718).

Two central divisions: State sword (see p. 253) of the Earldom of Chester, inscribed HUGO COMES CESTRIAE, commonly attributed to Hugh Lupus, created Earl of Chester 1070, but possibly of Hugh Kevelioc, Earl of Chester 1153–1180: the handle an addition of the sixteenth century; State sword of Edward, Prince of Wales (afterwards Edward V), as Earl of Chester, 1475–1483, with enamelled hilt (fig. 178); head-stalls ornamented with cloisonné enamel probably made at Venice in the sixteenth century; Scottish silver brooches, one known as the Loch Buy brooch, made at

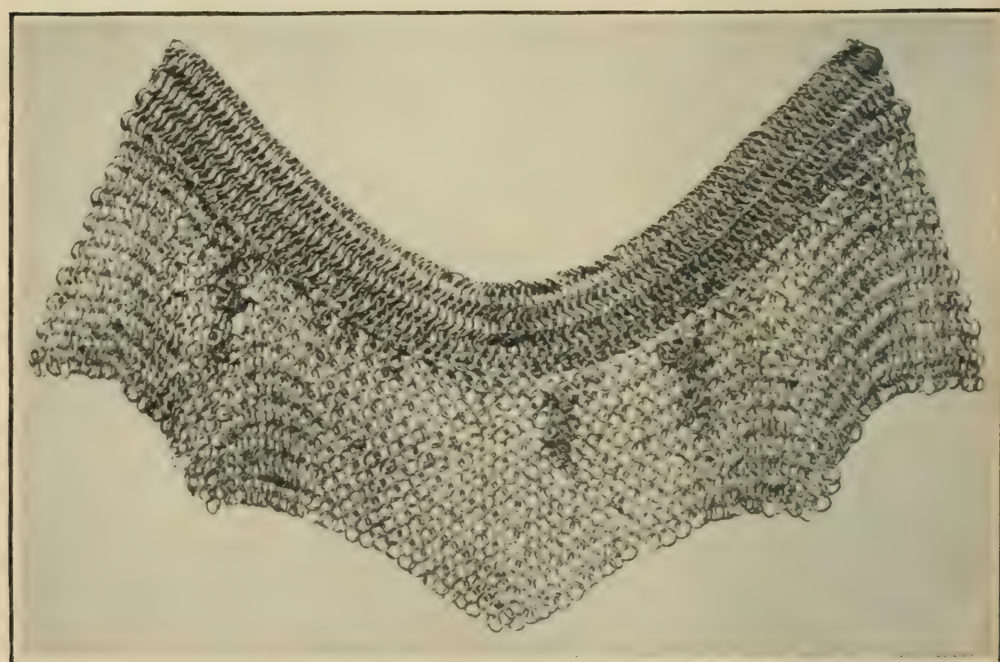


FIG. 3.—Standard, or collar of mail, fifteenth century.

Loch Buy, Isle of Mull, and the Glenlyon brooch, set with pearls and cabochon stones in an antique style; contemporary silver medallion stamped with maps illustrating the voyage of Sir Francis Drake, 1577–1580; hat of plaited ivory, perhaps of Indian work, of the Elizabethan period (fig. 4); dress sword of Edward Gibbon the historian (his watch and snuff-box in the Gold Ornament Room, Case W).

Right-hand division: quadrant with the badge of King Richard II (fig. 175); quadrant designed by Sir John Cheke for King Edward VI and signed W. B., 1551; astrolabe (see p. 67)

made for King Henry VIII by Bastien le Seney; astrolabe by Humfrey Cole, once belonging to Prince Henry (d. 1612), eldest son of James I; pocket dial with arms of Robert Devereux, Earl of Essex, favourite of Queen Elizabeth; finely chased boar-spear with portrait medallions and figures, said to have belonged to Duke Alexander de' Medici, Italian, sixteenth century; hour-

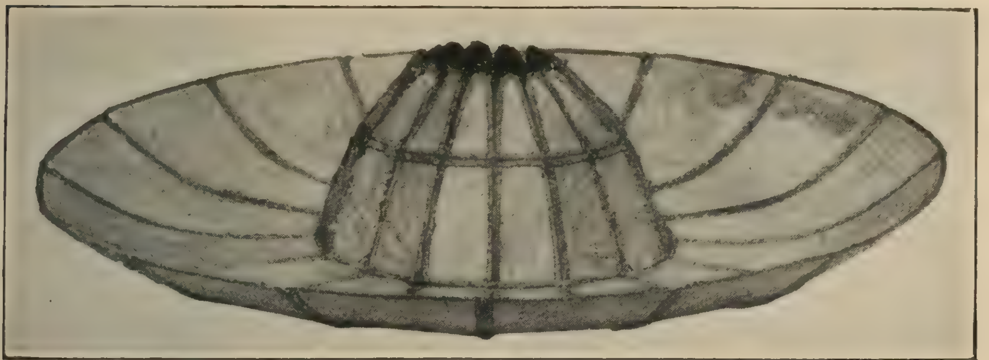


FIG. 4.—Hat of plaited ivory, sixteenth century.

glass with the arms of Stephen Bathori, King of Poland 1576–1586; carved stag's horn powder-flasks of the sixteenth century.

Along the middle of the case: punchbowl of Robert Burns; casket carved out of the wood of Shakespeare's mulberry tree and

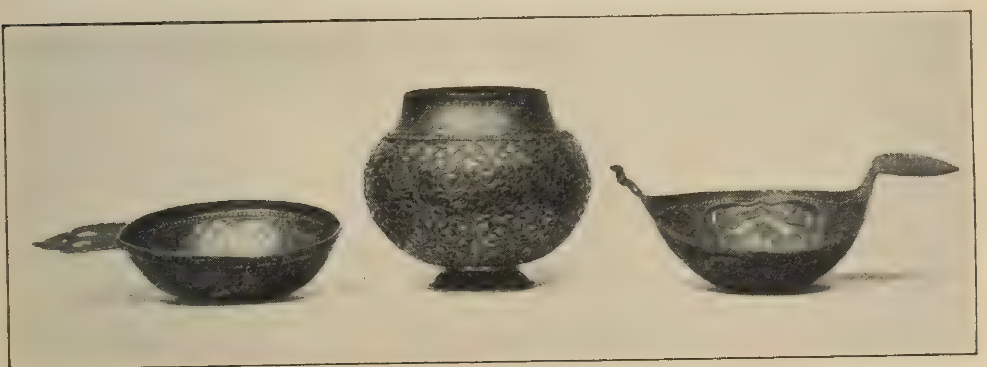


FIG. 5.—Russian silver cups, seventeenth century.

presented to David Garrick in 1769; walnut-wood cup mentioned by Shelley in his letter in verse to Maria Gisborne; silk garter with Jacobite motto; collar of the Russian order of St. Andrew, eighteenth century; collar of the Guelphic order with hall-mark of 1831.

North Side. Left half: Russian painted and champlevé enamels

(see pp. 122, 129) of the seventeenth century, bowls, flasks, casket, &c.; Russian silver cups of the types known as *bratina* and *charka* (fig. 5); silver cups ornamented with niello, eighteenth century; Oriental and European talismans and amulets, including astrological amulets of the seventeenth and eighteenth centuries (see p. 189 and fig. 147); bezoar stones (see p. 72); Goa stones (see p. 146); a crystal ball said to have been used by the famous Dr. John Dee; flat circular wax tablets engraved with magical figures and names used by Dr. Dee (fig. 46).

Right half: textiles of mediaeval and later date, including figured silk fragments from the tomb of Walter de Cantelupe, Bishop of Worcester (d. 1266); small fragments of figured stuffs from mediaeval seal-bags; embroidered bags, purses; book-covers of the seventeenth and eighteenth centuries; embroidered seal-bag with arms of the Duc d'Hostun (d. 1755).

WALL-CASES 10–20.

Metal Vessels and Utensils, etc.

Cases 10–16 chiefly contain objects of oriental origin or produced under oriental influence, the majority encrusted with silver (see **Saracenic Metal-Work**).

Cases 10–16. On the upper shelf: brass salvers and bronze buckets made in Venice by oriental workmen or in the oriental style in the fifteenth and early sixteenth centuries. In the middle of the cases: at back, other Venetian salvers, one with the name Ibn al-Kurdi, others with the arms of Venetian families; two fine Oriental salvers inlaid with silver, one made for Badr ad-Din Baisari at the end of the thirteenth century, the other for the Mameluke Sultan Shaban (A. D. 1346); on the steps, early ewers, with birds and lions in relief, probably made at Mosul in the thirteenth century (plate XII); ewer with the date A. D. 1232 and inscription stating it to have been made at Mosul—an important document for the history of this style of work (plate XII); a *kursi*, or stand for a tray, with names and titles of En Nasir ibn Kalaun, Sultan of Egypt (d. 1341); incense-burners, one with the date 1243; globular perfume-burner of Baisari (see above) made in 1277–1279; four-sided caskets made at Mosul about 1250; cylindrical casket of Badr ad-Din Lulu, King of Mosul (1233–1259); candlesticks of the fourteenth century, some with European coats of arms and made to European order; bowls, some Persian, of the fourteenth century; finely decorated writing-boxes made at Mosul and in Egypt in the fourteenth century (fig. 161); geomantic tablet signed by the maker at Mosul, and dated 1240–1241; curious

flask with ibex-handles obtained in the Punjab; Persian hawk-perch of the seventeenth century.

At the bottom of the cases: brass cisterns, one with the name of En Nasir ibn Kalaun (see above), another of the fifteenth century; small bowls, some with covers, with designs inlaid or outlined in silver, fourteenth to sixteenth centuries; magical bowls (see under **Magic**) with engraved formulae. On the steps



Fig. 6.—Brass rose-water dish, Nuremberg, fifteenth century.

on the middle of Cases 14–16 is a series of objects chiefly damascened with arabesques, and made in Venice in the early part of the sixteenth century, like the salvers already mentioned. They include a small salver and two covered bowls signed by Mahmud al-Kurdi; open bowls; jugs; vases; perfume-sprinklers; candlesticks, and hand-warmers (fig. 162). The upper and lower parts of these two cases contain European metal-work without damascening, and forming a single series with the contents of the next two cases.

Cases 17–18. Top shelf: brass rose-water dishes with embossed inscriptions and designs made at Nuremberg from the second half

of the fifteenth century, one with the Annunciation, one with St. George, and two with Adam and Eve (fig. 6).

At the bottom, Mediaeval and later jugs, ewers, basins, braziers, skillets, &c., chiefly of latten and bronze. Especially interesting is the exceedingly fine bronze jug (fig. 185), found at Kumasi during the British Ashanti Expedition, and acquired in 1896. It has upon it in relief the arms of England and the



FIG. 7.—English skillet, late seventeenth century.

badge of Richard II with the following inscription (given here in modern spelling):

He that will not spare when he may
Shall not spend when he would.
Deem the best in every doubt
Till the truth be tried out.

Two other large ewers of the fourteenth century, one with a lid in the form of a human face; bronze basins, of the twelfth century, for washing the hands, two engraved with the Virtues and Vices, the third with St. George; brass basin with Adam and Eve in the style of the Nuremberg rose-water dishes (see above); tripod cauldrons and skillets of the fifteenth to seventeenth centuries, found in England (fig. 188). Skillets of the seventeenth century with inscriptions on the handles, one with *Pitty the pore*, 1684 (fig. 7), the other with *C U B loyal to his Magiste*; 'aquamanile' a ewer in the form of a mounted man, German work of the fourteenth century (fig. 186); pewter salver with an enamelled roundel in the centre with arms of Charles I (fig. 164); three pewter plates, stamped with a crown and feather, found near Guy's Hospital, and probably of the early Tudor period.

On the middle shelves are two more ewers in the form of mounted men, one, a knight in full armour found near Hexham (fig. 153); two ewers in the form of a stag and a lion (fig. 102) respectively, German work of the thirteenth and fourteenth centuries; globular hand-warmers of about A.D. 1500; and a number of objects in pewter, including a jug with emblematical figures bearing the initials of François Briot, a dish or salver (fig. 165) with a central medallion representing Temperance, by Caspar Enderlein of Nuremberg (early seventeenth century), several smaller dishes or plates with subjects in relief made at Nuremberg about the time of Enderlein, a pewter salt; and a sacramental flagon, dated 1642, formerly in the church of Seaford, Sussex.

Cases 19 and 20. On the top shelf: pestles and mortars for domestic use dating from the sixteenth to the eighteenth centuries (fig. 187). At the bottom: larger mortars; a Flemish bell



FIG. 8.—Pint measures, seventeenth and eighteenth centuries.

made by Marc Le Ser in 1574; a pint measure dated 1601, and a Winchester pint of 1704 (fig. 8). In the middle of the cases: a number of statuettes, &c., of various dates, among which the fourteenth-century figure of a lady and her dog (fig. 154), and the elegant pedestal of later date (fig. 157), may be specially noticed; also a few plaquettes and portrait medallions, mostly of larger size than those in the adjoining Table-Case **K**; among them the portrait of René de Birague, Chancellor of France (d. 1583), by Germain Pilon. On the left are a bust of Socrates, Italian sixteenth century, and a crown worn by a bride in Norway (seventeenth century). On the back of the case a portrait in relief of Anne of Brittany (1476–1514), successively wife of Charles VIII and Louis XII of France; a copper-gilt frame for a figure of Amphitrite, French work of the Renaissance; and a set of medallions representing the twelve Caesars, made in the seventeenth century.

WALL-CASES 21–26.

Clocks, Astronomical Instruments, Dials, etc.
(See p. 108).

Cases 21–22. Top shelf: English lantern-clocks of the seventeenth century, one by Thos. Tompion (see p 88). In the middle of the cases, clocks of the sixteenth and seventeenth centuries, chiefly German and French, some horizontal, others with automatic figures (figs. 9 and 77). On the front shelf, clock by Bartholomew Newsum dated 1590 (fig. 78); alarum clock by Daniel Quare, 1670; and German alarum clock with strike-a-light and candle, early eighteenth century. At the bottom: globe-clocks of the seventeenth century, made to go by their own weight; Chinese horizontal clock dated 1830; dials and mathematical instruments of the sixteenth to eighteenth centuries.

Case 23. Large clock in the form of a ship (plate VII), probably made for the Emperor Rudolph II by Hans Schlott of Augsburg about 1581; French armillary sphere of about 1580, with clock movement; French astronomical clock with astrolabe; Italian clock of the sixteenth century; two German horizontal clocks of the seventeenth century; Dutch clock of 1640 with automatic figures; French celestial globe by P. Petit, 1659. At the back of the case: electrotype reproduction of a large astrolabe made for Philip II in 1566, from the original at Madrid. At the bottom: celestial globe made at Mosul in 1275; another oriental celestial globe of 1430; German armillary sphere of the sixteenth century; sun-dial with arms of a German abbot, seventeenth century; water-clock by Finchett of Cheapside, 1735. Above the case, lead cistern of the twelfth century.

Cases 24–26. Top shelf: Japanese clocks of the nineteenth century; German chess- and backgammon-boards of the seventeenth century. In the middle of the cases: along the back, Oriental astrolabes of the eleventh and thirteenth centuries; astrolabes made at Antwerp at the end of the sixteenth century; German astrolabe dated 1594. On the steps: oriental quadrants of the fourteenth century; oriental astrolabes of the thirteenth and later centuries, a fine example made by Abd el Kerim at Cairo in 1240; Spanish-Moorish and Spanish astrolabes of the thirteenth and fourteenth centuries; English astrolabe by Blakene, dated 1342; Italian astrolabe of the fourteenth century; Austrian astrolabe, 1491; three French astrolabes of the sixteenth century, one by P. Danfrie (1558–1584); German astrolabe of the sixteenth century; oriental quadrants of the fourteenth century; Italian quadrants, fifteenth and sixteenth centuries; English quadrants, fifteenth and seventeenth centuries; small pillar-dials of

the seventeenth century (fig. 88); pyramidal dial of 1647; gunners' levels, sixteenth and seventeenth centuries; German sliding measure for metals, about 1580; azimuth dial invented by Sir Robert Dudley in 1598; German, French, and English noc-

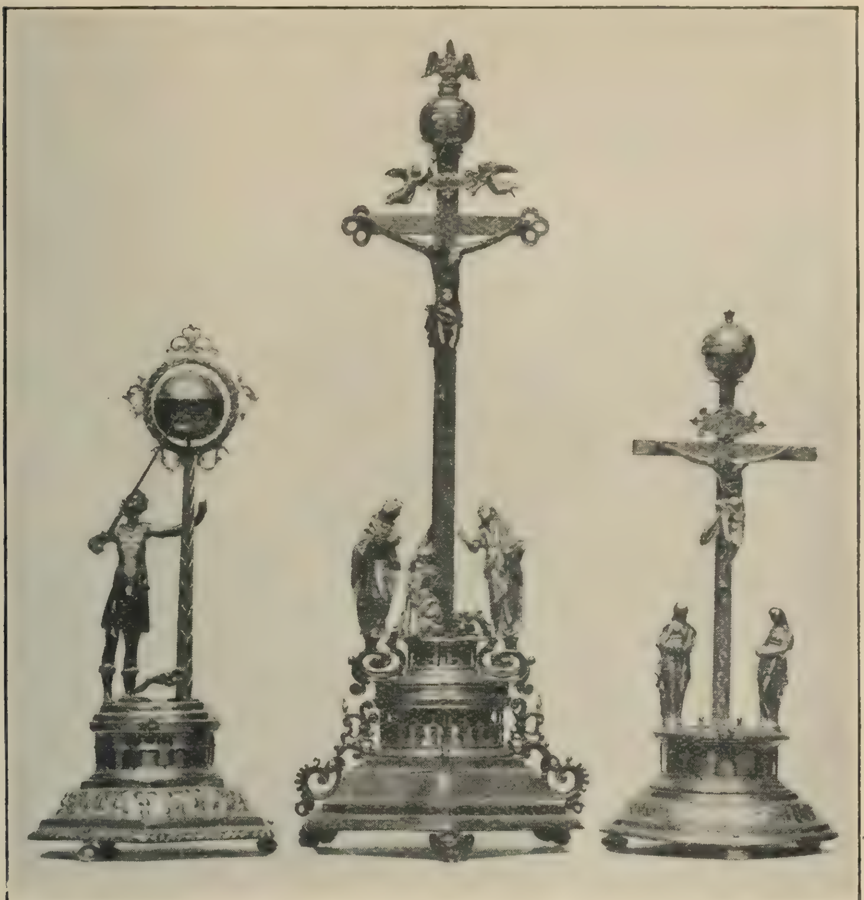


FIG. 9.—Clocks with automatic figures, German, seventeenth century.

turnals (see p. 106), one by Humfrey Cole, 1580 (fig. 89), compasses, sectors, &c.

At the bottom: English astrolabe of about 1260 with plates for the latitudes of London, Durham, York, Paris, and Rome (plate V); Persian astrolabe of 1722; quadrants, dials, and gunners' instruments of the sixteenth to eighteenth centuries.

Above Case **26**. Bushel-measure of Queen Elizabeth's reign.

The large and elaborate clock dated 1589, by Izaac Habrecht of Strasburg, now standing at the top of the main staircase, should be examined in connexion with the clocks in these cases.

TABLE-CASE G.

WATCHES AND DIALS BEQUEATHED BY OCTAVIUS MORGAN, ESQ., 1888.

East Side. Left-hand division: German clock-watches of the sixteenth century (fig. 87); a fine clock-watch on a stand, by Nicolaus Rugendas of Augsburg, about 1610; Swiss clock-watch of the same period; small astrolabe with Cufic inscriptions, made in Spain in the thirteenth century. Centre division: Dutch, French, and English watches of the first half of the seventeenth century; large German clock-watch, 1600–1610. Right-hand division: French, German, Dutch, and English watches of the



FIG. 10.—Watches, seventeenth century.

first half of the seventeenth century, some imitating natural forms, several in crystal cases; in the lowest row, watches of the second half of the century.

West Side. Left division: watches of the first half of the seventeenth century from various countries, some with enamelled cases, others with outer cases of piqué leather or tortoiseshell. Central division: watches of the second half of the seventeenth, and of the eighteenth century, one by Thos. Tompion, many of the cases enamelled or chased with figure-subjects; large repeater by J. Legeips of London. Right-hand division: watches of the eighteenth and nineteenth centuries, two of diminutive size and set in rings, one of which belonged to George III; Italian pillar-dial of the sixteenth century; combined horizontal dial and compasses, Augsburg, 1558; pedometer and dial, Nuremberg, eighteenth century. Along the middle of the case: armillary, folding, and other dials of the sixteenth to eighteenth centuries; in the middle, a German cup-dial of the sixteenth century.

TABLE-CASE K.

WATCHES AND DIALS; PLAQUETTES. (See pp. 84 and 230.)

South Side (facing middle of room). Left-hand divisions: English watches from the end of the sixteenth century to about 1650, and from 1650 to the nineteenth century; Swiss watches of the seventeenth century. Right-hand divisions: German watches and table-watch of the sixteenth to eighteenth centuries. In the vertical upper part of the case: selected watches from various



FIG. 11.—Silver portrait-medallions, Dutch, seventeenth century

countries dating from the sixteenth to eighteenth centuries; two table-clocks of the sixteenth century. Along the middle of the case: folding dials of the sixteenth and seventeenth centuries, chiefly of ivory and of German manufacture; armillary dials; cruciform dials; ring-dials, chiefly English of the seventeenth and eighteenth centuries and engraved with mottoes; pocket dials of the same period; perpetual calendars. Particularly worthy of notice are the cup-dial made by Bartholomew, Abbot of Aldersbach in Bavaria, 1550, and an exceptionally fine ring-dial by Humfrey Cole, signed and dated 1575 (fig. 88).

North Side. Plaquettes (see p. 230 and figs. 166–168) of bronze and lead, with a few embossed portraits in silver. Left-hand

divisions: Italian plaquettes, including examples by Giovanni delle Corniole, Moderno, Ulocrino, Giovanni Bernardi di Castelbolognese, and Valerio Belli, some of the small examples after antique gems; a few Flemish portraits in silver, seventeenth century (fig. 11). Right-hand divisions: German plaquettes, including examples by Peter Flötner, several in lead; French plaquettes of the sixteenth to eighteenth centuries; English portrait-medallions of the seventeenth and eighteenth centuries.

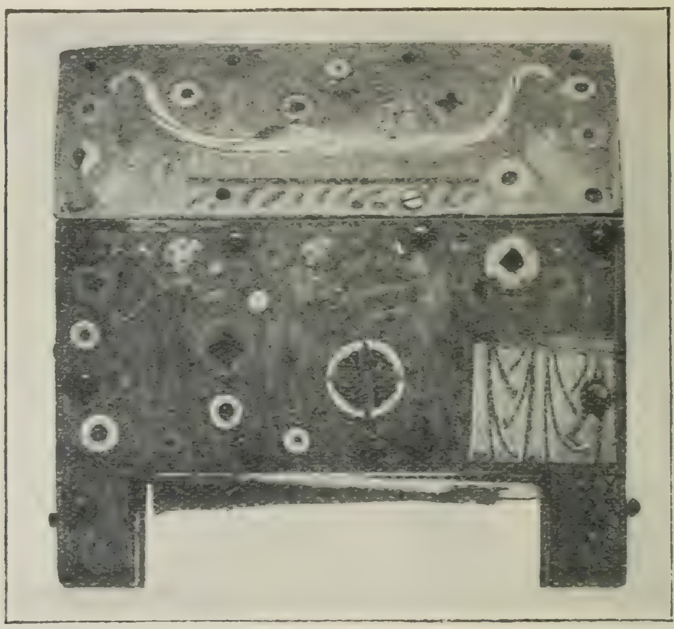


Fig. 12.—Enamelled reliquary, Limoges, early thirteenth century.

WALL-CASES 27–30.

Early Champlevé Enamels and Objects of Ecclesiastical use.

(See p. 116.)

Cases 27–29. Top shelf: processional crosses and crucifixes of the fifteenth and sixteenth centuries. Second shelf: enamelled gemellions (see p. 131 and fig. 13) made at Limoges in the thirteenth century. Middle shelves: chef (see p. 83) of the thirteenth century for the head of St. Eustace, from Basle Cathedral, the filigree wreath set with antique gems and other stones; gilt-copper crozier (plate XI) with applied floral ornament, nielloed plaques and cabochon stones, made by Frère Hugo (see p. 215) of Oignies, Namur, early thirteenth century, an interesting example of this famous craftsman's work; four enamelled croziers made at Limoges

in the thirteenth century; large processional cross of wood covered with gilt-copper plates and enamelled plaques, German, fifteenth century; gilt-copper processional cross with enamelled plaques, Italian, fourteenth century; six gable-ended chasses or reliquaries (figs. 12 and 94) of wood covered with enamelled plaques, Limoges, about A.D. 1200, two of them with scenes representing the martyrdom and entombment of Thomas à Becket (fig. 12); fine rectangular marriage casket of the same period with secular subjects enamelled on a ground engraved with a close scroll-design (fig. 81) like that upon the adjoining reliquary and on another in the Waddesdon Bequest, No. 19; silver-gilt shrine with architectural ornament of the fifteenth century; enamelled candlesticks made at Limoges in the late twelfth and the thirteenth centuries, one with the arms of Nesles and Dreux, Duke of Brittany (fig. 74); enamelled pyxes (see p. 244 and fig. 174), Limoges, thirteenth century; German enamelled pax of the twelfth century, gilt-copper incense-boat or navette (p. 150 and fig. 113) of the fifteenth century; bronze chrismatory (see p. 83) found at Cologne, thirteenth to fourteenth century; bronze openwork top of a censer, found at London Bridge, English, eleventh century, the shape of interest from its relation to contemporary Saxon architecture. Bottom of the case: embroidery for a cushion made for the Mayor of Hereford in 1604; tapestry portrait of Christ, stated in the inscription to be a copy of the engraved emerald given by Bajazet II to Innocent VIII as ransom for his captive brother.

Case 30. On the top shelf: portrait in oil of Frank of Borsalia, Earl of Ostervant (d. 1470). Middle shelves: gilt-copper figure of St. Cecilia, Southern French, thirteenth century; portable altar or super-altar (see p. 255, plate XIV) of marble and copper gilt, dating from the thirteenth century, engraved with the symbols of the Evangelists, and SS. Peter, Andrew, Stephen, Laurence, and enriched with two portraits of saints painted on vellum beneath crystal, and two panels of carved ivory with the Crucifixion and the Virgin and Child of earlier date than the altar itself: on the back are engraved the names of a number of saints whose relics the altar contained. Coffer-shaped portable altar of wood covered with silver plates engraved with heads of saints, German, thirteenth century; copper bowl with openwork foot (fig. 95), enamelled with busts of angels, and set with coloured pastes, made at Limoges in the thirteenth century, in the same style as the ciborium in the Louvre signed by G. Alpais; cover of a fine enamelled copper ciborium with figures of men, animals, and monsters, German, late twelfth century; silver chalice of the thirteenth century, from the Church of Berwick St. James, Wiltshire, with paten of later date (plate VI); copper-gilt chalice with enamels, signed by Ghoro di Ser Neroccio of Siena, early fifteenth century; gilt chalice, Flemish, fifteenth century; communion-cup

and paten with Norwich hall-mark of 1566, from Wiggenhall St. Germans, Norwich; silver communion-cup and cover with hall-mark of 1567 (plate VI); Spanish silver-gilt ciborium of the sixteenth century; English copper ciborium of the fifteenth century; Italian copper-gilt ciborium of the same century, with pyramidal cover and figures engraved on the sides; Flemish monstrance of gilt copper, fifteenth century; two small brass reliquaries with large inscriptions in black-letter, English, fifteenth century; two gilt-bronze panels with subjects in relief, one the Crucifixion, the other a saint, French, fourteenth century. In a



FIG. 13.—Enamelled gemellions (see p. 131), Limoges, early thirteenth century.

frame at the back is a *pietà* in wax, Florentine work of the seventeenth century, after a picture by Quentin Matsys in the old Pinakothek at Munich. Bottom of the case: complete and imperfect bronze censers (see p. 80 and fig. 75) of the thirteenth, fourteenth, and sixteenth centuries; lead funeral chalices (p. 82, fig. 76) and patens from Winchester and Old Sarum (thirteenth century), and Rhôs-Crowther, Pembroke (sixteenth century); bronze bell engraved with the Crucifixion and Saints, from Pickering, Yorks., English, fourteenth century; bronze dove, cross and crystal phial of the eleventh to twelfth century from a church in Calabria; copper-gilt plaque from a German reliquary of about A. D. 1200, with scroll designs and names of SS. Kilian, Maximus, Eusebius, and others; openwork fronts of paxes of the fifteenth century. Above the case: sculptured capital of the thirteenth century.

WALL-CASES 31 and 32.

Enamels, chiefly painted, of the Sixteenth Century and later. (See p. 124.)

Top shelf: oval enamelled portraits of George III and Queen Charlotte, by W. H. Craft, 1773; pastoral scene, probably by the same artist.

Middle of Cases: on back, panel with head of the Emperor Trajan, probably by Léonard Limousin; dish in grisaille, with the story of Cupid and Psyche, probably by Penicaud II; panel in colours with the Crucifixion, signed by Joane Ambrosio di Landriano, Italian, about 1500. On the middle shelf and steps: cup with low foot in grisaille, by Penicaud III, with Lot and his daughters; small plaque with Jupiter, Juno, and other deities, by Penicaud III: tazza in grisaille with the Banquet of the Gods, from the engraving by Marcantonio after Raphael, and grisaille plaque with Diana and hounds, of the school of Penicaud; tazza and cover, Dido feasting Aeneas, by Pierre Reymond, 1545; two hexagonal salt-cellars with the Labours of Hercules and subjects illustrating the wiles of women, by the same artist; tazza in grisaille with Abraham and Melchizedek, and large oval dish with the Banquet of the Gods, by Jean Courtois; panel in colours with the Ascension, signed N. B. 1543; another with St. Paul, signed C. N., about 1540; circular pax with the Virgin and Child in fine colours, French, about 1500; Italian pax in gilt-copper frame, the Virgin and Child with worshippers, fifteenth century (fig. 99); another with the Virgin and Child enamelled in relief, early sixteenth century; pax of Venetian enamel with Christ in the tomb, early sixteenth century. Bottom of the case: English and Russian enamelled brass candlesticks (fig. 98 and p. 122) of the early seventeenth century, with snuffers of the same period, some also enamelled; oval enamelled portraits of Sir William Hamilton, by W. H. Craft (1802), and of William III, probably by the same artist.

TABLE-CASE E.

Enamels. (See p. 106.)

In the vertical upper part of the case: French painted enamels of the sixteenth century; ewers in grisaille by Jean Courtois and Pierre Reymond (fig. 14); grisaille plates by Pierre Reymond, P. Corteys, and other artists, with scriptural and mythological

subjects; medallion by Léonard Limousin with portrait of Francis the Dauphin, son of Francis I, on the front (plate VIII), and on the back a portrait of his father; silver panel with the Virgin, St. Elizabeth and children in colours, and on the back Joseph being let down into the well, in grisaille; dish of Venetian enamel with conventional designs in blue, white, and gold.



FIG. 14.—Enamelled ewer, by Pierre Reymond, Limoges, sixteenth century.

South Side (facing the middle of the room): twelve coloured panels representing the Sibyls by Léonard Limousin, about 1550; plaque with the Adoration of the Magi, school of Léonard Limousin; set of plates in grisaille in the style of Penicaud III illustrating the story of Psyche from engravings by the Master of the Die after Raphael; large panel in grisaille with figure of Hope by Penicaud II; panel with the Annunciation by Penicaud I; panel with the Virgin and Child by Pierre Reymond; small plaque with Our Lord taking leave of his Mother after an engraving in Dürer's Little Passion, in the style of Pierre Reymond; this plaque was found in Abyssinia at the time of the expedition against King Theodore, and has a silver mount with an engraved figure of the Saint Gabra Manfas Kedūs; panels in colours and in grisaille of the Penicaud school; enseignes for hats in grisaille; large panel with the Crucifixion by Jean de Court; oval plaques, intended for the backs of mirrors, by Suzanne de Court and others; series of panels from a casket by Jean Court, 1555; panels in colours and grisaille by the

Nouailhers and Jean Laudin ; miniature portrait of a lady dated 1651 by H. Toutin ; watch-case with battle-scenes, &c., by the same artist.

North Side (left-hand divisions): enamels of various styles and dates. Book-covers with Rhenish champlevé enamels of the twelfth century; panels with scenes from the Old Testament and busts of angels by Godefroid de Claire of Huy, or in his style, end of the twelfth century; two semicircular panels, perhaps ends of an altar piece, with figure of Henry of Blois, brother of King Stephen, and Bishop of Winchester, 1129–1171, with inscriptions referring to him round the border (fig. 93); cross with Old Testament scenes attributed to Godefroid de Claire



Fig. 15.—Plaque of translucent enamel, Cologne, fourteenth century, two glass enamelled medallions, French, sixteenth century.

(fig. 92); two panels, Limoges about 1200, with figures of the Virgin and St. John (fig. 96), with engraved backgrounds like those of three caskets already mentioned (Case 27); Limoges enamelled cross, twelfth century; figures from Limoges crucifixes, thirteenth century; enamelled quatrefoil panel with the Crucifixion in relief on enamelled ground, and with filigree borders; Limoges enamelled medallions and small plaques.

Right-hand divisions: Limoges enamelled book-covers of the fourteenth and fifteenth centuries; Italian crucifix with enamelled panels at the ends of the arms, probably Sienese about A.D. 1400; Italian cross of gilt bronze with enamels, fifteenth century; two very primitive copper panels with the symbols of St. Mark and St. Luke in cloisonné enamel, probably Italian of the twelfth century; three circular ornaments of gilt bronze with the Crucifixion, the Virgin and Child and an angel in relief on enamelled

grounds, one bearing the arms of Warden Abbey, Beds., fifteenth century. Panel in colours with the Holy Family, in the style of Nardon Penicaud (fig. 100), small circular medallion with the Adoration of the Magi in the style of Nardon; four circular medallions beautifully painted with portrait heads, North Italian about 1480; Italian and French translucent enamels of the fourteenth century on sunk relief in silver; plaque with the Last Supper; circular medallion with the Crucifixion; silver medallion copying a *lion d'or* of Philippe de Valois (1328–1350); two small panels of translucent enamel attributed to Cologne, fourteenth or early



FIG. 16.—Armorial pendants, thirteenth and fourteenth centuries.

fifteenth century (fig. 15); glass paste with arabesques in gold and enamel (fig. 15), French, sixteenth century. Enamelled roundels, medallions, many made to ornament the centre of salvers or dishes (as fig. 164), dating from the fourteenth to the seventeenth centuries.

WALL-CASES 33 and 34.

Along the top: front of a Florentine *Cassone* or marriage-coffer of the first half of the fifteenth century, painted on panel. Middle and bottom of the cases: fragments of wall-paintings illustrating the Life of Job and the History of Tobit from St. Stephen's Chapel, Westminster, dating from about 1356 (plate II). The principal subjects are Job addressing his children; Job's daughters asking permission to go to the feast; the destruction of Job's



Plate II. Wall Painting, St. Stephen's Chapel, Westminster, about 1356.

[See p. 20.

children; the messenger bringing the news to Job; the Comforters with Job; the nuptial feast of Tobias; Tobit and the sparrow. These paintings are of high importance and interest for the history of English art and costume in the fourteenth century. On the central slope: series of armorial pendants (see p. 55 and figs. 16 and 52), some still retaining their enamel; the fine series in the middle having formed the ornament of a horse's peytrel. On the extreme left: bronze pieces of horse-trappings or harness, showing the manner in which some of the pendants were attached. In the bottom of the cases: painted and gilded architectural fragments from St. Stephen's Chapel, Westminster;



FIG. 17.—Battersea enamels, eighteenth century.

wooden crozier from a tomb in St. Stephen's Chapel, Westminster, supposed to be that of William Lyndewode, Bishop of St. Davids and Privy Councillor (d. 1446). Above the cases: large sculptured head from a corbel, English, early fourteenth century.

TABLE-CASE L.

On the shelves at the top: mediaeval chessmen of morse ivory and bone, the most remarkable found at Uig in the Isle of Lewis (Hebrides), and dating from the twelfth to thirteenth century (fig. 104 and p. 136).

North Side (facing middle of room). Left half: small wooden and metal boxes with portraits upon the lids, eighteenth and nineteenth centuries; boxwood case containing silver plaques with portrait of Gustavus Adolphus, King of Sweden (1611–1632);

enamelled badges, medallions, and watch-cover, sixteenth to eighteenth centuries, including badge of a king's messenger, *temp.* George III; enamelled portrait of Nat. Chauncy, Esq., by W. Burch, 1786; arms of the Freemasons painted in Battersea enamel; boxes, flasks, étuis, trays for counters, &c., painted and printed by transfer from copper plates at Battersea about 1750 to 1760 (fig. 17). Right half of case: medallions and plaques with portraits and figures printed by transfer at Battersea and Liverpool; engraved silver medallion with German portrait of 1637; enamelled and painted counters; box containing sixpences of Queen Elizabeth, used as counters.

South Side. Left half: ivory and other counter-boxes of the early eighteenth century: silver counter-boxes and counters, some struck in imitation of engraving by the Passe family (see p. 94), seventeenth century; German wooden draughtsmen stamped from metal dies with historical events, portraits, and allegorical subjects, late seventeenth century. Right half: similar draughtsmen; oriental chessmen of ivory, wood, and horn, of mediaeval date from Egypt; ivory and bone draughtsmen, many carved with animals and figures, twelfth to thirteenth century (fig. 116).

TABLE-CASE H.

West Side. Series of ceremonial gilt keys used by Chamberlains in various European Courts in the eighteenth and nineteenth centuries (fig. 18). Along the middle: brass tobacco-boxes of the eighteenth century, engraved and embossed (fig. 184 and p. 259); wooden snuff-raps (p. 22).

East Side: portrait medallions in pressed horn (fig. 173 and p. 242), and tortoiseshell, and boxes with similar portraits on the lids: among the more interesting portraits are those of Frederick Henry, Prince of Orange, and Amelia, Princess of Orange, made by John Osborn at Amsterdam in 1626; Henri IV of France; the Duc de Sully; Charles I; William III; William and Mary; Queen Anne; and the Duke of Marlborough; several of them by Obrisset (see p. 243); pressed horn boxes with historical and mythological scenes; boxes of pressed wood, chiefly of the early nineteenth century, similarly ornamented with portraits and scenes; tortoiseshell boxes with portraits in silver; series of papal rings (see p. 178 and fig. 137).

WALL-CASES 35–43.

Ivory Carvings and Sculptures in Stone.

(See also Table-Case F and p. 151.)

Wall-Cases 35 and 36. Ivories of the pre-Gothic period. **Case 35.** Two sets of panels from caskets of the Early Christian period (for which see *Guide to the Early Christian and Byzantine Antiquities*), fifth century; panel with the Baptism and Disputation with the

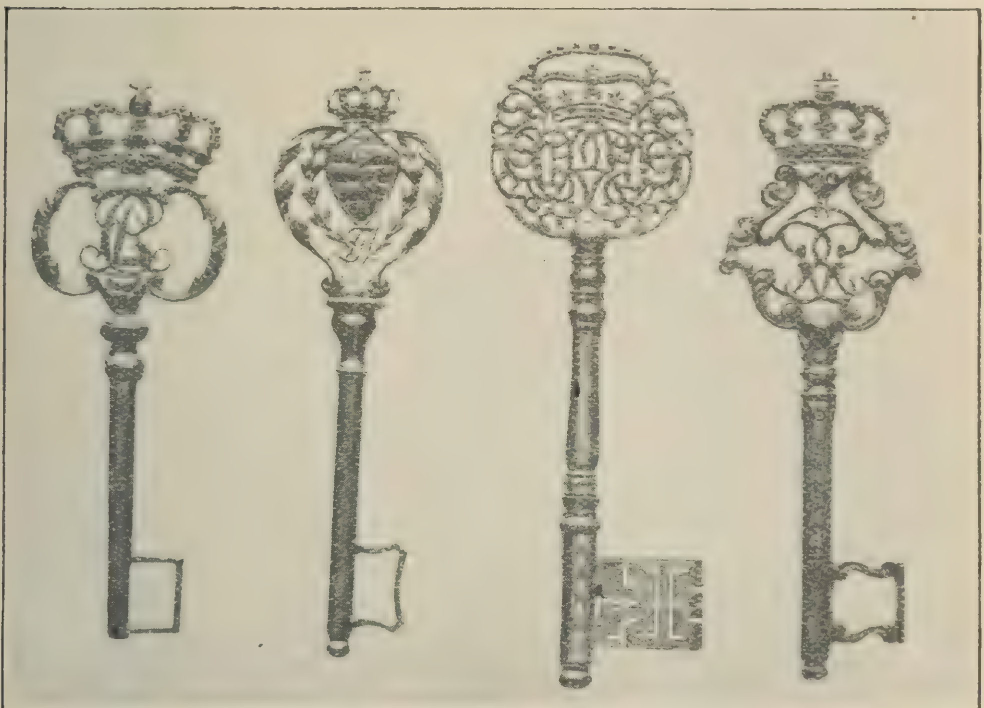


Fig. 18.—Chamberlains' keys.

doctors, of the same date; four cylindrical boxes (pyxides), one of late Roman pagan art, two with Christian subjects probably made in Egypt in the sixth century, one of the Carlovingian period, imitating the earlier style; figure of a consul, fifth or sixth century; remarkable ivory vase with vine-scrolls enclosing busts of angels in medallions, probably made in the Christian East; panel in a wooden frame, the raising of Lazarus, sixth century; large panel with the Adoration of the Magi and Nativity, probably the centre of a leaf of a composite diptych of the sixth century made in Syria or Egypt; panel with the Baptism, of the same period; Byzantine ivories of the ninth to twelfth centuries, including two sides of a large casket with hunting-scenes and

figures of dancers ; panels with the Nativity, Entry into Jerusalem, Descent into Hell ; Carlovingian panels from book-covers and diptychs, of the ninth and tenth centuries, with scenes from the life of Our Lord ; panels carved in Germany and France in the eleventh and twelfth centuries (fig. 19).



Fig. 19.—Ivory panel, thirteenth century.

At the bottom of the cases begins a series of reredos-tables carved in alabaster between the fourteenth and sixteenth centuries and of English workmanship (see p. 52 and figs. 50 and 51). The subjects are Gospel scenes, representations of the Trinity and of Saints, the head of St. John the Baptist in a charger.

Cases 37–41 chiefly contain ivories of the thirteenth to the fifteenth centuries inclusive ; in Cases 42 and 43 are further ivories of the fifteenth century with others of later date. In Cases 37 and 38 special attention may be drawn to the ivory statuettes of the Virgin and Child (plate I, frontispiece), the panel carved in openwork and showing, like the panels near it, traces of colour, and to the fragments of panels in white alabaster found in the wall of Kettlebaston Church, Suffolk, fine English work of the fifteenth century. Case 39 contains two of the rare ivories to which an English origin can be ascribed with certainty—a diptych (fig. 118) bearing in the lower spandrils of the leaves the arms of John Grandison, Bishop of Exeter (1327–1369), and a panel of the same character : these carvings are executed in a massive and original style which in itself distinguishes them from contemporary French work. In Cases 40 and 41 a fine little carving with the Agony in the Garden, still coloured, and two openwork panels may be noticed : on the upper shelf is a triptych in carved

bone and intarsia-work made in the North of Italy, probably at Venice, at the end of the fourteenth century, and a large Italian crucifix. Cases 42 and 43 contain several ivory paxes (see p. 225), one signed by *Jehan Nicolle*; with panels, statuettes, and busts, chiefly of the sixteenth and seventeenth centuries, some made in the Portuguese colonies: at the top is a bust of Sir Isaac Newton by Le Marchand.



FIG. 20.—Pearwood medallion: portrait of Kathrina Echinger, dated 1522.

Above the cases are two interesting carved stone capitals of the twelfth century from Lewes Priory, Sussex, one with biblical scenes.

TABLE-CASE F.

North Side. Selected ivory carvings.

Left half: pierced panel representing Bellerophon slaying the Chimaera, fourth century, leaf of a diptych with the apotheosis of Romulus, son of Maxentius (d. 308); magnificent panel with standing figure of the Archangel Michael, probably carved in Syria or Asia Minor about the fourth century (see *Guide to Early*

Christian and Byzantine Antiquities, frontispiece); leaf of a large diptych with subjects from the life of Christ, German, tenth century; carved case for pens (?) found in London. beautifully carved with scrolls and figures of the eleventh to twelfth century; panel with two gryphons found at Old Sarum, twelfth century; series of writing tablets of the first half of the fourteenth century with religious and secular subjects; small casket of the fourteenth century with its original metal mounts; fine pierced panel of the fourteenth century with thirty minute scenes from the life of Our Lord; bone stylus for writing on wax tablets (fig. 194). In the



Fig. 21.—Boxwood medallion portrait of Charles, King of Castile: afterwards the Emperor Charles V. German, 1516-1519.

vertical part of the case, among several wooden statuettes of the sixteenth and seventeenth centuries: head of a tau-cross (plate X) magnificently carved with foliage and figures, found at Alcester, English, early eleventh century; remarkable Carlovingian reliquary of the ninth or tenth century; Flemish ivory tankard of the seventeenth century; alabaster carving with figures of saints, fifteenth century.

Right half: two French ivory caskets of the early fourteenth century, one with subjects from various romances (figs. 120, 121), the other with the story of the Châtelaine de Vergi; ivory croziers of the twelfth to fourteenth centuries; finely carved comb of the

eleventh century (fig. 115); Italian ivory comb of about 1500; box-wood comb inlaid with ivory, French, fifteenth century; wooden comb with figures in gesso of the same country and century; frag-

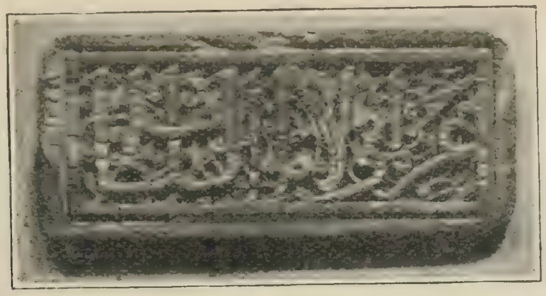


FIG. 22.—Carved ivory panel: Saracenic, fourteenth century.

ments of other combs; ivory mirror-cases, chiefly French, of the fourteenth to sixteenth centuries (figs. 82 and 158); *memento mori* of the sixteenth and seventeenth centuries; Saracenic ivory panels

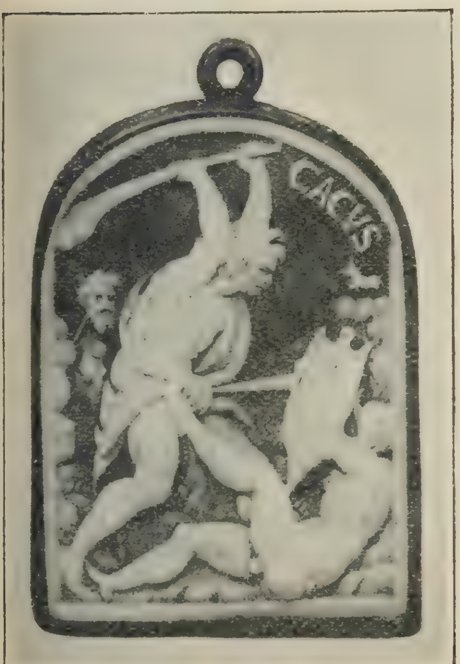


FIG. 23.—Shell cameo: Hercules and Cacus. Italian, about 1500.



FIG. 24.—Shell cameo: Ganymede; late sixteenth century.

(fig. 22) and cylindrical caskets of the fourteenth century. In the vertical part of the case: the Crystal of Lothair (864–869), engraved in intaglio with the story of Susanna (fig. 106), two other Carlovin-

gian crystals each with the Crucifixion in intaglio; cups of agate and bloodstone and flask of lapis lazuli; sixteenth and seventeenth centuries, wax portrait of Michelangelo at the age of eighty-eight by Leone Leoni, with bronze medal by the same sculptor; silver busts of a man and woman, Dutch, about 1640; bronze and silver group of Venus and Adonis, Flemish, seventeenth century.



Fig. 25.—Statuette of a Benedictine, sixteenth century.

South Side. Left half of the case: medallion portraits in ivory of the seventeenth and eighteenth centuries (fig. 122), including Sir Christopher Wren and Samuel Pepys, by David Le Marchand; German medallion portraits in pearwood of the sixteenth century (figs. 20 and 21); boxwood medallion, design for the Great Seal of George III; pearwood medallion portraits of Charles II and James II; wooden medallion of Oliver Cromwell.

Right half: portraits and reliefs in wax: bust of a young man, Italian, about 1500; German portrait busts of the sixteenth century (figs. 189 and 190); relief representing the Crucifixion of St. Nestor, Italian, about 1550; marriage of Henri IV of France and Marie de Medicis; medallion portraits by Abraham Simon (?1622–1692 ?), including portrait of the artist. Wax model made by Michelangelo. Shell cameos of the fifteenth to seventeenth centuries made in Italy, France, and Germany (figs. 23, 24, and 109); carvings in hone-stone (figs. 68–9, German, sixteenth century, including portraits and a relief representing the Naming of St. John with the Monogram of Albert Dürer; jet figures of St. James of Compostella, Spanish, sixteenth and seventeenth centuries; jet panel with

scenes from the life of Joseph, sixteenth century ; carnelians with designs burned by acid, Italian, sixteenth century.

WALL-CASES 44 and 45.

Carvings in Ivory and Bone, Caskets, etc.

Large casket ornamented with intarsia and carved bone plaques illustrating the Story of Susanna, school of the Embriaco family working in Venice at the end of the fourteenth century (fig. 119, and cf. triptych in Wall-Case 40) ; three small caskets from the



Fig. 26.—Pastry-cook's knives and apple-scoop.

same workshops, one with the Story of Jason ; pilasters, panels, and series of plaques in the same style, one series illustrating the Romance of the Knight of the Swan, and a panel the Judgement of Paris ; ivory figure of Prometheus, Italian, sixteenth century ; two Italian caskets of the fifteenth century covered with painted and gilt gesso with floral and animal designs (plate IX) ; marble figure of the Virgin and Child, Flemish, sixteenth century ; small figures of painted alabaster, probably Spanish, sixteenth century.

On the top shelf: fragment of a terracotta figure forming part of a group by John of Bologna; terracotta figure of Neptune, school of that sculptor; wooden pedestal representing the ages of man, French, sixteenth century; wooden figure of a Benedictine dredged from the Thames at London Bridge (fig. 25).

Bottom of the cases: wooden cups and bowls with incised ornament, English, early seventeenth century; wooden cups with four handles (methers); coffer covered with incised leather and bound with iron, fifteenth century; casts of the faces of Charles II of England and Charles XII of Sweden; wax death-mask believed to represent Oliver Cromwell.

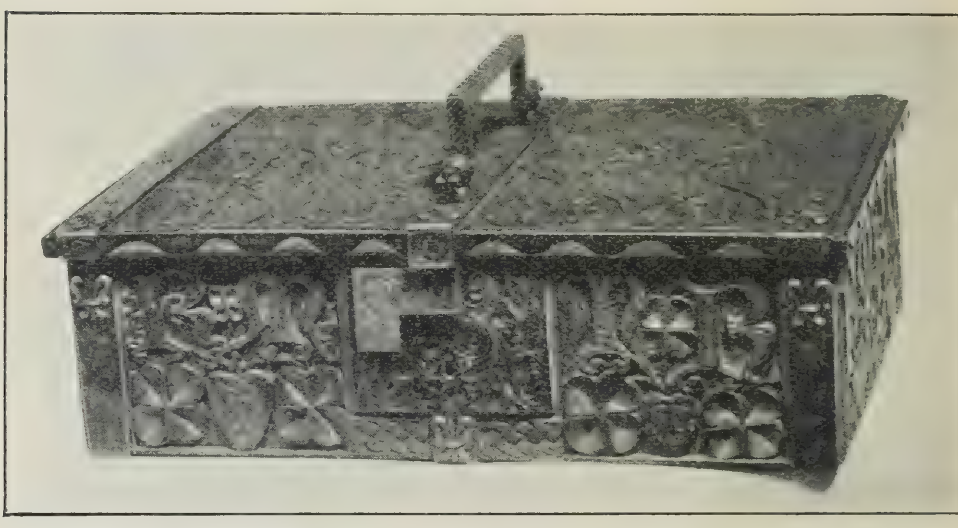


Fig. 27.—Pearwood casket said to have belonged to Mary Queen of Scots.

WALL-CASES 46 and 47.

Caskets, Drinking-Horns, etc.

Middle shelves: various caskets, including a French example covered with thin embossed plates with figures of knights and ladies, French, fourteenth century; French caskets covered with cuir-bouilli and mounted in iron, of the fourteenth to sixteenth centuries, one, of the earlier date, with figures of knights and ladies; French iron casket, fifteenth century; carved wooden caskets of the fifteenth and sixteenth centuries, French, Flemish, and German; Scottish casket of pearwood, fifteenth century, carved with the letters R and M, quatrefoils and strawberries: said to have belonged to Mary Queen of Scots, but probably made for a member of the Frazer family (fig. 27); carved ivory horn

of West African work, recarved in Europe and mounted as a drinking-horn in 1599: it bears the motto—

Drinke you this and thinke no scorne
All though the cup be much like a horne



Fig. 28.—Cuir-bouilli case from Little Welnetham, early sixteenth century.

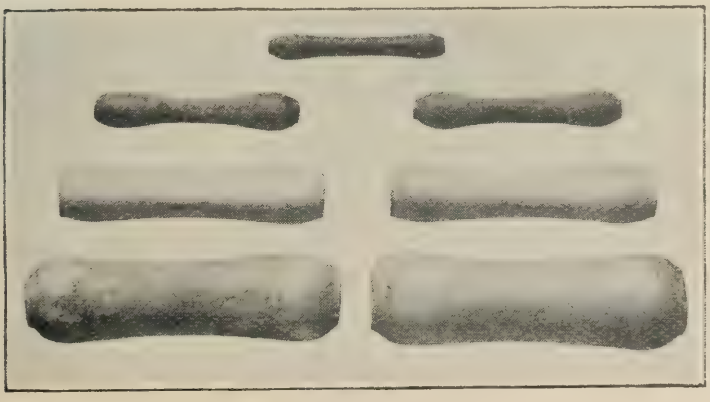


Fig. 29.—Pipeclay wig-curlers, seventeenth century.

Large horn with incised designs, seventeenth century; Scandinavian hunting-horn with figures in relief, fifteenth century; horn of an ibex with mount of the sixteenth century with inscription dedicating it to St. Cuthbert of Durham as a 'gryphon's claw' (fig. 112 and p. 147); amber tankard with figures in relief, North German work, 1659, lent by the Vicar and Churchwardens of North Mimms, Herts. (compare another amber cup in the Waddesdon Bequest, No. 229); stone relief representing the appearance of the Tiburtine sibyl to Augustus, Flemish, sixteenth century. Bottom of the cases: large round-topped wooden coffer bound with iron and covered with cuir-bouilli ornamented with figures and scroll-designs, fifteenth century; leather bombard or large jack dated 1646, from Kensington Palace (see p. 181 and fig. 140), leather costrel of the same period.



Fig. 30.—Venetian chopine, sixteenth century.

Top shelf: bust of Henry VIII and the Lady Mary carved out of brown coal; carved wooden statuettes.

WALL-CASES 48 and 49.

Miscellaneous Objects.

Caskets and cases of cuir-bouilli (see p. 96): one used to contain church plate at Little Welnetham Church, Suffolk, English, early sixteenth century (fig. 28); casket of pressed horn, seventeenth century (for other work in pressed horn see Table-Case H and p. 242); silver-gilt cup made in London, 1799 (fig. 170); portrait medallions in pear-wood of Speaker Onslow, Lord Raymond, Robert Walpole, Earl of Orford, eighteenth century; marble relief, bust of the Young Pretender, shaving-bowl made of part of a seychelle nut, seventeenth century; Runic calendars (see p. 246); wafering irons (p. 265); bone skates (p. 72 and fig. 67); pipe-clay wig-curlers of the seventeenth century (fig. 29); mallet and ball for playing the game of pall-mall, seventeenth century (see p. 138 and fig. 105); early billiard cue of ivory; carved panel used as a mould for plaster, with arms of Charles I; chopines or clogs worn by the ladies of Venice, early sixteenth century (fig. 30); leather shoe of the fifteenth century from the Thames; section of a pile of old London Bridge; large iron horse-shoe made at Oakham on the occasion of the visit of the Bishop of Peterborough in 1690, according to an old custom requiring



Fig. 31.—Carved panel by Tilman Riemenschneider, sixteenth century.

lords temporal and spiritual to have such horseshoes made; wooden pitch-pipes from Poundstock, Cornwall; case for rush-lights when used as night-lights, and rush-holder; tray, tea-pots and cups carved in stone.

On the walls between these cases and Case 50: wooden relief



Fig. 32.—Leather shoes, sheaths, &c., fourteenth and fifteenth centuries.

representing the Adoration of the Magi by Tilman Riemenschneider (fig. 31); frame with leather shoes, pouches, sheaths, &c., of tooled or embossed leather found in London and dating from the fourteenth and fifteenth centuries (fig. 32); marble panels with trophies, Italian, early sixteenth century; bronze memorial tablet to Peter Schortz and his wife, cast at Bamberg in 1594. In a case on the floor: a cannon ball which entered the bows of the Victory at the Battle of Trafalgar.

TABLE-CASE C.

Matrices of Foreign Seals; Foreign Weights.

See pp. 190 and 268.

West Side. Italian and French Seals. Seals of Bartolomeo Querini, Bishop of Castello (d. 1291); of the College of Canon Law, Bologna, fourteenth and fifteenth centuries; of the Chapter of the Cathedral Church of Udine, Friuli, a fine fourteenth-century seal; of the College of Justices of Perugia; of the city of Siena; the provincial of the Franciscans in Dalmatia; Bartolomeo, Archbishop of Conza della Campania, 1359–1389 or 1390; the Episcopal Court of Todi, Umbria, and Jacobus d'Ygnano, doctor of Laws, all of the fourteenth century; of Francesco Bellante, Bishop of Grosseto; Bartolomeo Zabarella, Archbishop of Florence; Antonio Davila, Bishop Suffragan of Modon; Pandolfo, son of Galeotto Malatesta; the convent of St. John and St. Paul at Venice authorizing admission to the library which, after 1494, was called the Library of St. Mark, all of the fifteenth century; seals of cardinals, archbishops, bishops, and others of the sixteenth century and later.

French seals of the thirteenth century and later, ecclesiastical, municipal, and personal; including seals of the Leper House of St. Radegund of Lievray, Normandy (found with the fine seal of Boxgrave Priory in Table-Case D), and of the Treasury of Langres, both fourteenth century; the Convent of regular Canons of Lille dated 1411; Jean Parnaut, Provost of Varennes, fifteenth century; and others of the following centuries.

East Side. Left-hand division: German seals. Fine early matrices of the Convent of St. Gereon, Cologne, the Church of SS. Peter and Gorgonius of Minden, and the Church of St. Mary, Königsdorf (near Cologne?), twelfth century; of the towns of Boppart, thirteenth century, Deutz, about 1300; of the Church of St. Castor, Carden, district of Coblentz; the Guild of Cordwainers, Cologne, fourteenth century; of the priests of the Fraternity of the Virgin Mary, Zwolle, Overyssel, Netherlands, fifteenth century; judicial seal of Sigismund as King of the Romans, &c. (elected Emperor 1410, d. 1437), and others. Oriental seals of the seventeenth and eighteenth centuries.

Central division: Swiss, Flemish, and Spanish seals, including those of the Consuls of Basle and the Dizaine of Goms, Valais, fourteenth century; the treasury of St. Isidore, Seville, and others.

Right-hand division: Scottish seals, seals of the Chapter of the Church of St. Mary, Caithness, and the Borough of Dunblane, Perthshire, thirteenth century; the Vicar of the Dominicans, fifteenth century; the Cistercian abbey of St. Mary, Newbottle,

Midlothian, sixteenth century; and others. Irish seals of Brian O'Neill, King of the Irish of Ireland, 1258; of the Abbot of the Austin Canons of SS. Peter and Paul, Clones, Co. Monaghan; the clergy of the diocese of Kilmore, both fourteenth century. Series of British Colonial seals.

Along the middle of the case: weights of the thirteenth to the seventeenth century from Toulouse and other cities in the south of France (see p. 269 and fig. 33); weight of 52 grains with head of Galeazzo Maria Sforza, Duke of Milan (1465–1476); set of weights of the sixteenth century in cuir-bouilli case; boxes of money-changers' weights of the seventeenth and eighteenth centuries; stamps for making papal bulls of Paul II (1464–1471) and Pius II (1456–1464).



Fig. 33.—French pound and half-pound weights, thirteenth to seventeenth centuries (see p. 269).

TABLE-CASE D.

Matrices of English Seals; English Weights.

(See pp. 190 and 268.)

East Side. Left-hand division: seals of ecclesiastical officials and jurisdictions from the twelfth to the eighteenth century, including a bronze matrix of the Priory of St. Mary Magdalene, West Bromwich, twelfth century: a silver matrix of the Archbishop of Canterbury's Commissary for Visitations, of the fifteenth century; silver seal of William, Abbot of Strata Florida (Stratfleur, Cardiganshire), of the late fourteenth century; Thomas Peverell, Bishop of Llandaff, 1398–1407; Paschal, Abbot of St. Mary Graces near the Tower, 1420–1421; John Sante, Abbot of Abingdon, 1469–1495; seals of deaneries, archdeaconries, vicar-generals, commissaries, &c. Three ancient lead forgeries of matrices of

bishops of Lincoln and Durham in the twelfth century, and an Archbishop of Canterbury at the close of the following century deserve notice.

Central division: seals of religious foundations. Matrix in morse ivory of the Benedictine mitred abbey of St. Albans, Herts., twelfth century; beautiful composite bronze matrix (see p. 196) of the thirteenth century belonging to the Benedictine Priory of SS. Mary and Blaise at Boxgrave, Sussex; bronze matrices of St. John's Hospital, Shaftesbury, Dorset, thirteenth century; of the Carmelite Priory of Marlborough, Wilts.; the Black Canons Priory of St. Denis, Southampton (fig. 148); the Cluniac Priory of St. Mary, Tickford, Bucks.; the Chantry of Thomas de Brembre, Wimborne, Dorset; the Abbey of St. Agatha, Easby, Yorks.; the College of the Holy Trinity, Stratford-on-Avon, all of the fourteenth century; seals of the Friars of the Holy Trinity, Hounslow; the Premonstratensian Abbey of St. Radegund, Bradsole, Kent; the Guild of the Holy Cross, Stratford-on-Avon; the Fraternity of the Guild of St. John the Baptist, St. Lawrence, and St. Anne, Knoll, Warwick; the Fraternity of St. Thomas the Martyr in Rome, all of the fifteenth century; sixteenth-century matrices of the Guild of St. Mary, Thetford, Norfolk; the Hospital of St. Stephen, Norwich; and of the Crutched Friars, Hart Street, Tower Hill, London.

Right-hand division: seals for labourers' passes under the Statute of Cambridge 1388 (see p. 195 and fig. 149); seals of sheriffs and mayors, including a fine silver matrix of the thirteenth century of the mayoralty of Lincoln and three bronze matrices of sheriffs of Oxford in the fourteenth and fifteenth centuries; seals for customs and subsidies, the finely cut Edwardian customs' seals being worthy of notice (fig. 149); seals of peculiar ecclesiastical jurisdictions dating from the fifteenth and sixteenth centuries; seals of the fourteenth century set with antique and mediaeval intaglio gems (see p. 195 and fig. 150); seals of companies and corporations, including those of the Weavers' Company (fig. 149), the Fraternity of Tailors at Exeter, the English Merchants in Holland, the Wardens of Rochester Bridge, Kent, all of the fifteenth century; the common seals of Criccieth, thirteenth century, and Droitwich, fifteenth century; seal with a merchant's mark (see p. 199).

West Side. Left-hand and central divisions: personal seals in chronological order, beginning with examples of the twelfth century. Especially interesting are the beautiful silver matrix of the seal of Joanna, daughter of Henry II of England (b. 1165, d. 1199) as Queen of Sicily, and as Duchess of Narbonne, Countess of Toulouse and Marchioness of Provence (fig. 148); the silver matrix of the seal of Robert Fitz-Walter (fig. 148), which from the arms engraved upon it must have been made for the fifth

Baron between 1298 and 1304, though the style of the work would indicate an earlier period; a contemporary lead forgery of the seal of Henry II, Duke of Normandy and Aquitaine and Count of Anjou, the original being used between 1171 and 1174; and three silver matrices made for Sir Walter Raleigh as Warden of the Stannaries, Captain of the Queen's Guard and Governor of Virginia (fig. 34).

Central division: seals, chiefly of the fourteenth century, with love mottoes, religious mottoes and invocations, and mottoes of a more general character, some in the form of rebuses. Right-



FIG. 34.—The Raleigh seals (the impressions above, the matrices below).

hand division: seals for the delivery of wool and hides, chiefly of the reign of Edward I (fig. 149); seals of high officials under the Crown, including those of John, Duke of Bedford, Regent of France as Lord High Admiral (d. 1435); of other admirals of the fifteenth century (fig. 148); and of John de la Pole, Earl of Lincoln and Lord-Lieutenant of Ireland (1484–1487). Various other seals, and leaden impression of seal of the Order of the Garter, seventeenth century. Along the top of the case: English weights and scales, including spherical steelyard weights with arms of Richard, Earl of Cornwall, as King of the Romans; steelyard weight in the form of a human head; weights for half a stone

chiefly of the seventeenth century; small sets of weights of the sixteenth century; box of small weights with arms of Henry, fifth Earl of Worcester, who died in 1646; box of money-changers' weights made by John Kirk 1747.

TABLE-CASE B.

North Side (facing centre of room). Left half: spoons (see p. 249 and fig. 177) of silver and base metal from the fifteenth to the eighteenth centuries, including a fine Flemish silver-gilt and enamelled folding spoon of about 1500 with cuir-bouilli case (plate XIII), examples with acorn, pineapple, and maidenhead tops; seal-headed spoons of the late sixteenth and early seventeenth centuries and apostle-spoons of the same period; pied-de-biche spoons of the time of William and Mary and Queen Anne; pilgrims' signs, and lead badges worn by retainers of great families (figs. 35–6, 63–66, and p. 69), including examples from Canterbury, with a stone mould for casting figures of St. Thomas à Becket.



FIG. 35.—Pilgrim's sign, fourteenth century.

Right half: cases of cuir-bouilli, chiefly Italian of the fifteenth and sixteenth centuries, including a case for a book of the fifteenth century (fig. 83), a case for an astrolabe (fig. 85), a case of surgeon's instruments (fig. 84); cases for pyxes; a case for knife, fork, and spoon; knives and forks of the fourteenth century and later, among them a set of carving knives with enamelled handles, made for John the Intrepid, Duke of Burgundy (d. 1419), in a case made for his daughter Ysabel, Countess of Penthièvre (fig. 139); French carving-knives of the late fourteenth century; knife with carved bone handle of the time of Elizabeth; English wedding-knives of the seventeenth century, one pair, in an embroidered case, from the old house of the Dymoke family at Scrivelsby, Lincs.

Along the middle of the case: German carved wooden knife-

sheaths of the late sixteenth century, with scriptural scenes; miscellaneous small knives and scissors; thimble, *temp.* Charles II;

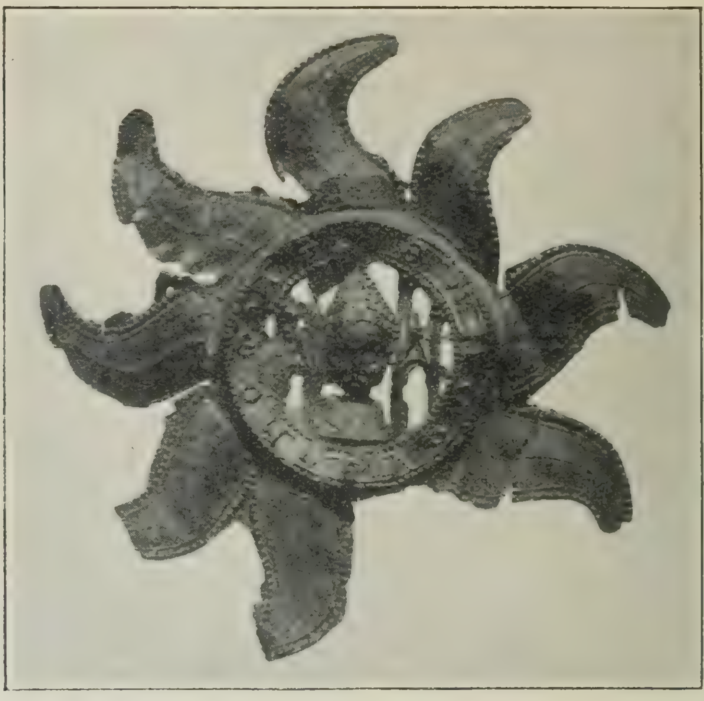


FIG. 36.—Canterbury pilgrim's sign, fourteenth century.



FIG. 37.—Head of a fool's bauble, fourteenth century.

roundels or fruit-trenchers painted with mottoes, &c. (see p. 245 and plate III), made in England in the Elizabethan period; sets of Napier's Bones (see p. 214); runic calendars and Staffordshire clog almanacs.

South Side. Miscellaneous objects of various dates, including tally-sticks (see p. 256 and fig. 180), three of the fourteenth century, relating to sales of wood, supplies of horses, &c.; mortuary crosses, one, probably of the eleventh century, inscribed *Crux Christi triumphat, Crux Christi pellit hostem,* from Bury St. Edmunds; keys and locks (see p. 183 and figs. 143–5); tobacco-pipes and stoppers of the seventeenth century and later (p. 259 and figs. 182–3); frames of gypcières or pouches (see p. 242), some of the fourteenth century, with religious



Plate III. Elizabethan Fruit Trenchers.

[See p. 40.

inscriptions in niello; metal and wooden nut-crackers (see p. 217 and fig. 160); bookbinder's stamps; stone moulds for casting jewellery and other metal objects; bronze head of a fool's bauble of the fourteenth century (fig. 37), and French fool's bauble of the seventeenth century; carved shoe-horn; bone and metal pins, &c., &c.





FIG. 38.—Monumental brass: the Virgin of the Annunciation, fifteenth century.

FIG. 39.—Monumental brass: a civilian, fifteenth century.

WALL-CASES 50–52.

SEPULCHRAL MONUMENTS, BRASSES, ETC. (See p. 74.)

Brasses: fine Flemish brass with the head of a bishop, 1360–1370 (fig. 70); monument of the Bailly de Jeumont (d. 1531) and his wife; English civilians of the fifteenth and seventeenth

centuries ; man in armour, about 1510 ; the Virgin of the Annunciation, fifteenth century (fig. 38); shields, one palimpsest (see p. 74), having on one side the arms of Fitzadrian of the late fifteenth century, on the other a merchant's mark of earlier date (fig. 72). Other palimpsests, including two circular plates, one having on one side the heads of a priest and of four boys, about 1430, and on the reverse a mathematical instrument of the seventeenth century ; the second, on one side a priest named Thomas Quythed, about 1460, and on the reverse a pair of compasses of the seventeenth century (fig. 71); a group of seven daughters about 1470, with portion of a figure, perhaps foreign, on the reverse others. Beautiful fragment representing part of a man wearing a tabard with arms of Fitzwilliam, about 1550 (fig. 73); quatrefoil plates with the symbols of the Evangelists of the fifteenth century (fig. 40); groups of sons and daughters of the sixteenth century ; fragments and letters from inscriptions of the fourteenth century and later ; armorial shields of the sixteenth century ; small plate with two skeletons, seventeenth century ; copper-gilt panel, embossed with a man in armour kneeling to a crucifix, probably from a German tomb of the sixteenth century ; sepulchral inscriptions of the sixteenth century ; tomb slabs carved with figures, foreign, fifteenth century ; lead case made for the heart of Sir Henry Sidney, 1586.



Fig. 40.—Monumental brass : symbol of St. Mark, fourteenth century.

PASSAGE TO THE GOLD ORNAMENT ROOM.

Franks Bequest.

Cases on the left.

First Case, left-hand section: gold mediaeval brooches of the fourteenth century, chiefly English, some inscribed, others set with gems (fig. 123); miniatures of the seventeenth and eighteenth



Fig. 41.—Enamelled morse, Sienese, fourteenth century.

centuries including David Garrick, Peter the Great, the Duke of Cumberland, Augustus the Strong of Saxony, &c.; enamelled locket with head of Charles I; memento mori; badges of the

Order of the Bath; badge with the number 45, inscribed 'Wilkes and Liberty' and relating to the imprisonment of Wilkes for the publication of No. 45 of the *North Briton*; various trinkets.

Middle section: morse (see p. 214) of translucent enamel on sunk relief (see p. 109) with the Birth of St. John the Baptist, Sienese, fourteenth century (fig. 41); two Hungarian morses of the eighteenth century set with turquoises, &c.; enamelled German and Spanish pendants and jewels of the sixteenth century; enamelled medallions with portraits of Charles I and Charles II; bloodstone cameo with the head of Christ and crystal intaglio of the same, Italian, sixteenth century; gold coronation medal of Frederick, King of Bohemia, husband of Elizabeth, daughter of James I; enamelled Lesser George of the Garter, seventeenth century; English jewel with cameo of Queen Elizabeth; enamelled gold medallion for hat (*enseigne*) of Carolus von Sternsee, German, sixteenth century; German gold reliquary engraved with the Annunciation, late fifteenth century; French gold locket with engraved figure of St. Barbara, sixteenth century; Russian silver pendants with silver filigree work, sixteenth century; Jacobite badge, seventeenth century.

Right-hand section: crystal and silver-gilt pinnacle for a shrine, English, fifteenth century; silver gilt cruciform reliquary, Spanish, fifteenth century; Byzantine gold openwork bracelet; Flemish gold brooches and *enseigne* set with gems, fifteenth century; fragment of a gold crown set with sapphires, rubies, and pearls, Rhenish, eleventh century; gold seal of Alexander Seton, first Earl of Dunfermline (1555–1622), and silver seal of Charles Seton, second Earl; German seal 1532; Italian nielloed scissors, sixteenth century; girdle with plates and medallions, ornamented with niello and enamel, Venetian early sixteenth century; enamelled gold reliquary, English fifteenth century; medallion of translucent enamel, French about 1400; Spanish perfume-ball set with emeralds, sixteenth century; gold pendants, crucifixes, and crosses seventeenth century; pendent jewels, &c.

Second Case.

Rings from the twelfth century to modern times (see p. 172 and figs. 42–45, 124–137). The series begins at the far end.

Far end: gold ecclesiastical rings, many set with sapphires and amethysts, twelfth to fourteenth centuries; English and foreign rings of the fourteenth century, with inscriptions next division; iconographic rings (see p. 176) with figures of patron saints, fifteenth century; the Coventry ring (fig. 42), English, about 1457, with the five wounds of Christ; signet-rings of the fourteenth and fifteenth centuries with intaglio gems antique and mediaeval; Venetian nielloed bow-ring (see p. 173) of the four-

teenth century used as a signet by Zeno Donati (fig. 127); Italian signet-rings of the fourteenth and fifteenth centuries; German and French signets, chiefly of the sixteenth century; signet with intaglio sapphire, belonging to James Sobieski (d. 1737), father of Clementina Stuart.

Second and third divisions from the end: ornamental rings chiefly set with stones of the sixteenth century and later; gimmel rings (p. 175); fede- (p. 175) and puzzle-rings; rings with magical inscriptions; rings set with toadstones (fig. 134 and p. 177); giardinetti or nosegay rings of the eighteenth century.

Fourth division: English gold signets of the fifteenth century, the bezels engraved with arms, crests, monograms, merchants'

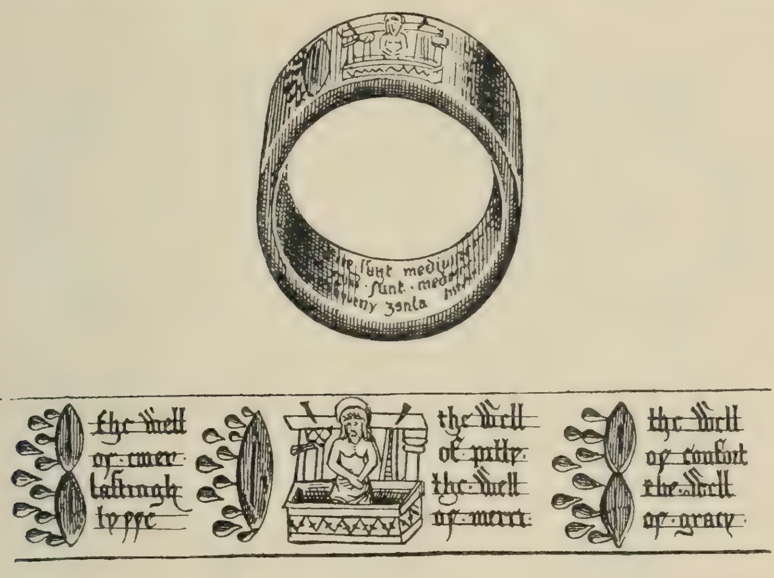


Fig. 42.—The Coventry ring, fifteenth century.

marks, &c.; among them the 'Percy' signet (fig. 44); English gold armorial signets of the sixteenth and seventeenth centuries; gold ring set with a white sapphire engraved with the arms of England and the cipher of Queen Henrietta Maria; rings of the sixteenth and seventeenth centuries with intaglio gems.

Fifth division: Italian nielloed rings of the fifteenth century; rings set with diamonds for writing on glass; rings with sun-dials in the bezels; decade (see p. 174 and fig. 128) and devotional rings; English posy rings with rhymed mottoes, seventeenth and eighteenth centuries; sergeants' rings (p. 179 and fig. 138).

Sixth division: English mourning rings of the seventeenth, eighteenth, and nineteenth centuries (fig. 45); Stuart rings with portraits of Charles I, Charles II, and the Chevalier St. George (d. 1766); Jacobite signet with cipher of the old Chevalier

engraved upon a sapphire; mourning-ring for Jacobites executed in 1746; rings with royal portraits including Queen Anne, Queen Mary (d. 1695), William III, George III by Tassie, William IV, &c.; rings with portraits of Mme. de Maintenon (on ruby), John Wilkes, Dr. Johnson, William Pitt, Jeremy Bentham, and Lord Nelson; other portrait rings.

Last division: among various Oriental and African rings are



Fig. 43.—Gold signet, fifteenth century.



Fig. 44.—The 'Percy' signet, fifteenth century.



Fig. 45.—Mourning-ring, seventeenth century.

a series of papal rings (p. 178 and fig. 137), and Jewish marriage and betrothal rings (p. 178), other examples of which are in the second North Gallery, Wall-Case 33, and the Waddesdon Bequest, Nos. 195–6.

Case on right hand.

First section: Italian nielloed pendants of the fifteenth an sixteenth centuries; Italian jewellery of the sixteenth century

enamelled Adriatic jewellery consisting of a pendant in the form of a two-headed eagle and ear-rings in the form of ships; Russian enamelled pectoral crosses of the sixteenth and seventeenth centuries; Spanish jewellery of the same period, including devotional pendants with figures enamelled in relief.

GOLD ORNAMENT ROOM.

Case O. Against the end wall on the left. Series of finger-rings arranged chronologically, beginning with examples of the twelfth and thirteenth centuries. Among them will be found



Fig. 46.—Intaglio, by W. Burch, R.A.; cameo, Cupid and Psyche, by Amostrini.

early ecclesiastical rings, Italian fourteenth-century signets and nielloed rings of the fifteenth century, amuletic and iconographic rings of the fifteenth century, signets and ornamental rings of the sixteenth century, fede-rings of the same date; mourning, posy, amuletic, and ornamental rings of the seventeenth and eighteenth centuries; sergeants' rings (p. 179); and a number of cameo and intaglio stones of the sixteenth century and later, mounted as rings in modern gold hoops. The cameos comprise portrait busts of the sixteenth and seventeenth centuries, mythological subjects, including a very spirited Bacchic scene; mythological and classical subjects of the eighteenth century, including the Flora of Pistrucci, and graceful groups by Pichler, Amostrini (fig. 46), Cades and Girometti (see p. 144). The eighteenth-century intaglio stones include busts by L. Pichler, W. Brown, and W. Burch, R.A. (fig. 46). A seventeenth-century sard at the end of the series has busts of the Seven Bishops.

CASE W.

Above the case: the Royal Gold Cup (see p. 236 and fig. 171) with subjects from the life of St. Agnes executed in translucent enamel on sunk relief. Made in France and presented to Charles VI by the Duc de Berri, it passed into English hands during the Hundred Years' War and belonged to English kings from Henry VI to James I, who gave it in 1604 to Don Juan Velasco, Constable of Castile, on his visit to England to negotiate a treaty of peace. At the end of the nineteenth century it was sold in Paris by the Convent to which the Constable had given it, and ultimately purchased by subscription with the aid of the Treasury in 1892.

Above the far corner, near the window: gold reliquary for a thorn of the Crown of Thorns with scenes from the Passion of Our Lord in translucent enamel, French work about 1310, given by George Salting, Esq.; cloisonné enamelled medallion with busts of St. George and St. Theodore, Byzantine, eleventh century.



FIG. 47.—Signet of Mary Queen of Scots.

Between the Gold Cup and the window, divisions numbered 16 and 17: gold bulla or seal of Edmund, King of Sicily, second son of Henry III of England (d. 1295); gold hawk's vervel (see p. 135) of Henry IV; the Juxon medal, a pattern five-broad piece given by Charles I on the scaffold to Bishop Juxon; gold signet-ring of Mary Queen of Scots, with the arms of Scotland and monogram of the Queen and Francis II (fig. 47), Prayer Book of Queen Elizabeth in enamelled gold binding; gold medallion of Queen Elizabeth with enamelled border; gold watch, said to have belonged to Oliver Cromwell, by Robert Grinkin of London; silver snuffers with enamelled arms of King Henry VIII and of Cardinal Bainbridge, Ambassador to the Pope (d. 1514); watch given by James II to his daughter the Countess of Anglesey; enamelled memorial of Charles I; ring in memory of the Jacobite lords executed on Tower Hill in 1745; gold snuff-box with portrait of Napoleon I set in brilliants, given by the Emperor to the Hon. Mrs. Damer; gold snuff-box given by Napoleon to Pius VI in 1797, who presented it to Lady Holland; gold watch and snuff-box of Edward Gibbon the historian; enamelled gold snuff-box of Queen Charlotte; other snuff-boxes of the eighteenth century; mourning-ring in memory of Lord Nelson; mediaeval English brooches; cameos of the sixteenth and seventeenth centuries, mostly in gold and enamelled frames, including one with Hercules and Omphale given by Charles V to Clement VII, and

a fine portrait head (fig. 110) by Alessandro Cesati (Il Grechetto) who worked 1538–1561 ; magnificent cameo (fig. 48) representing the entry into the Ark, once in the collection of Lorenzo de' Medici ; Italian intaglios with classical and hunting-scenes of the sixteenth century ; gold pomander case (see p. 172), English, sixteenth century ; crosses, crucifixes, pendants and badges in gold, enriched with enamel or gems, chiefly of the seventeenth and eighteenth centuries, and including a badge of the baronets of

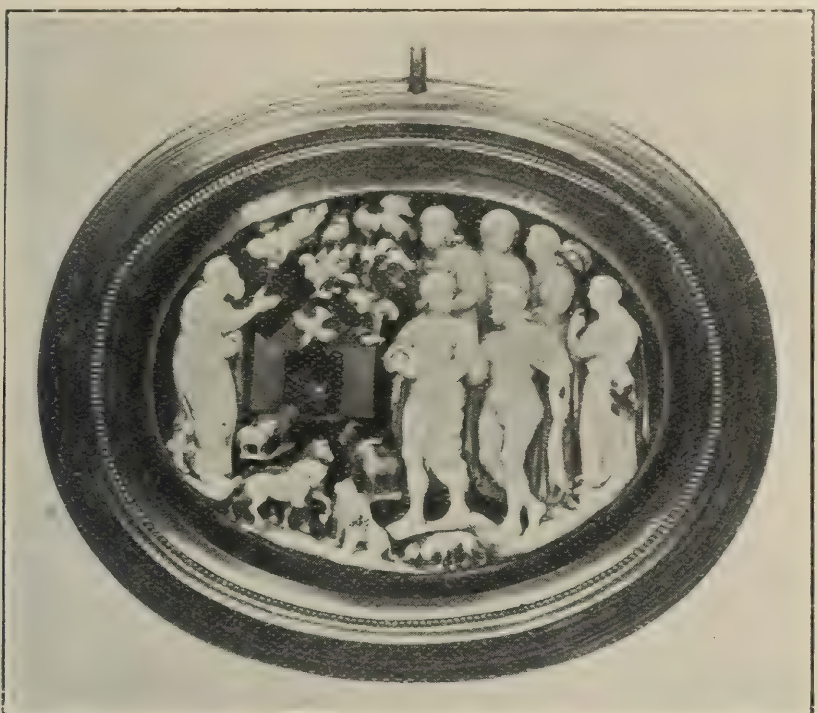


FIG. 48.—Cameo, the Entry into the Ark, from the Collection of Lorenzo de' Medici.

Nova Scotia; small enamelled and jewelled cups, Russian, seventeenth century; bloodstone cup mounted with jewels, sixteenth century; large German rosary ring with inscription of the fifteenth century.

In the angular division (numbered 15), towards the window: the so-called Cellini Cup (fig. 172) really made at Nuremberg in the sixteenth century (see p. 240); rock crystal cups of the sixteenth and seventeenth centuries; rock crystal spoon of the sixteenth century ; intaglios on rock crystal ; cabochons of crystal from books of the Gospels, reliquaries, &c., of the twelfth and thirteenth centuries ; circular dish of avanturine jasper ; snuff-boxes, &c.

CASE W.

Inner Slopes. Left divisions: cameos of mediaeval and later date. Worthy of notice are the mediaeval stones with Christ in the Garden (thirteenth century?), three men in a ship, about 1350 (fig. 108); the head of a lady of the fifteenth century and the portrait of René of Anjou, King of Sicily, 1409-1450 (fig. 107); also the portraits of Lorenzo de' Medici, Philip II of Spain, Mary Queen of Scots, Napoleon I, &c.; religious and classical scenes of the sixteenth century; busts of the seventeenth and eighteenth centuries.

Under the gold cup: drawing of the cup in its original form (fig. 171).

Right-hand divisions: continuation of the series of cameos:



Fig. 49.—Mazer, English, early sixteenth century.

classical busts, groups, and figures of the sixteenth and seventeenth centuries, including a fine head of the Emperor Augustus.

CASE U.

Inner Slopes. Divisions 1 and 2: intaglio gems from the sixteenth to eighteenth centuries, including examples by Pichler, Rega, Marchant, and W. Brown.

WALL-CASE Q.

Franks Bequest, 1897.

Vessels of pottery, glass, &c., of various periods. Among these may be noticed English and German stoneware jugs with silver mounts of the late sixteenth century (fig. 87) and a Rhodian jug with an English mount of 1597.

WALL-CASE S.

(Collection of Cups, Franks Bequest, 1897.)

Specially remarkable are the Flemish mazer with enamelled foot of the fourteenth century; English mazers of the sixteenth century (see p. 198 and figs. 49 and 151); an Arab crystal cup with Flemish mounts of the fourteenth century; German silver-gilt cups and chalice of the fifteenth century; Scandinavian drinking-horn of the same period (fig. 86); cup in form of a ship; nautilus cup, ostrich egg cup, coco-nut cups of the sixteenth century; the Goodricke Cup of 1563 imitating an ostrich egg in silver; silver cup in shape of a globe engraved with the map of Oronce Finé of 1531 and resembling another cup at Nancy; Lord Burleigh's cup, a narrow glass tankard with silver mounts and his arms enamelled on the cover; tankards, tazzas, bowls, salvers, spoons, &c., of various countries and periods.

GLOSSARY.

ABSOLUTION CROSSES AND MORTUARY CROSSES.

The absolution cross was cut from a sheet of lead and inscribed with formulae of absolution, which were placed upon the breasts of the dead in the eleventh and twelfth centuries. They have been found in various parts of England and France.

Mortuary crosses, also made of lead, were commonly inscribed with the words *Crux Christi pellit hostem, Crux Christi triumphat*, or with the name of the deceased. Examples have been found at Bury St. Edmunds (Table-Case B) and elsewhere. The plain lead crosses in Case 49 are ascribed to the fourteenth century.

AGNUS DEI.

These words are used to describe the lamb with the flag bearing a cross. In their more particular sense they refer to discs impressed at Rome with this design, probably from the ninth century, out of the wax of the Paschal Candle. According to the present ceremonial, which dates from the sixteenth century, they are blessed by the pope at the beginning of his pontificate, and on the same day in every seventh year. They have been highly treasured by their possessors, and often worn in the same manner as relics, to avert pestilence, fire, tempest, and sudden death: they were

sometimes placed in cases of fine workmanship. Before the latter part of the sixteenth century they were commonly painted and gilded, but in the year 1572 this kind of decoration was forbidden. The example in Table-Case **G** is of the pontificate of Clement XI (A.D. 1700–1721); in the same case is a bronze matrix (fourteenth century) with which impressions of the *Agnus Dei* were made. The value attached to these objects led to the manufacture of spurious examples, a practice condemned in papal bulls.

AILETTES. *See* p. 61.

ALABASTER CARVINGS.

The Museum unfortunately possesses few examples of mediaeval sculpture in stone, mostly of a period subsequent to the great



FIG. 50.—Alabaster carving: the murder of St. Thomas à Becket. English, early fifteenth century.

development of sculpture in the thirteenth century; though some very interesting capitals from Lewes Priory and a fine fourteenth-century head above the Wall-Cases should be noticed. The

remaining sculptures are nearly all reliefs in alabaster made for reredos-tables with painting or gilding more or less perfectly preserved; a few date from the fourteenth, but the greater number from the fifteenth century. The fragments from Kettlebaston at the top of Cases 37 and 38 show the finest workmanship, and in the delicate treatment of the drapery in some measure recall the sculptures in the Lady Chapel of Ely Cathedral. The rest, though more perfect, are not of equal artistic merit, but



FIG. 51.—Alabaster carving: the Resurrection. English, late fourteenth century.

are of considerable interest as English work of the time of the Hundred Years' War. They are very numerous both in this country and in France, whither they were exported during the period of English ascendancy; but they also travelled to greater distances, examples being known both from Italy and Iceland. The alabaster employed was obtained at Tutbury, in Staffordshire, and Chellaston Hill, near Derby. There may have been a local school of carvers at Tutbury, to which some of the well-known alabaster sepulchral monuments in the district may be ascribed; but the records seem to show that the carvers of the less imposing

reredos-tables chiefly worked at Nottingham, probably employing the Chellaston stone. Sculptors are known to have lived at Chellaston itself, as well as at York and Burton. In 1369–1370, Edward III paid Peter the Mason, of Nottingham, a sum due for an alabaster reredos for the Chapel of the Canons of Windsor; and about the same period an alabaster reredos was made for Durham Cathedral. There is thus evidence that reliefs



FIG. 52.—Enamelled armorial pendants, thirteenth and fifteenth centuries.

of this character were being made in the second half of the fourteenth century; and certain details in the armour on one, at least, of the Museum examples suggest this earlier period. But the greater part belong to the following century, throughout which they continued to be produced; while in the records of the borough of Nottingham there is a reference to a legal suit about an alabaster carving as late as the year 1530.

An interesting division of these reliefs is formed by the examples representing St. John's head in a charger, generally

flanked by St. Peter and an archbishop (St. Thomas à Becket or St. William), with other figures, one of which is usually that of Christ in the tomb, or the Lamb. There appears to have been a peculiar veneration for the head of St. John in the diocese of York, and it is conjectured that this series of reliefs should be regarded as devotional tablets made for private persons belonging to a guild, possibly the Guild of the Corpus Christi in the City of York itself. St. Peter and St. William are both York saints.

ALPHABETS. *See* p. 181.

AMULAE. *See* p. 95.

AMULETS. *See* p. 189.

AQUAMANILES. *See* p. 131.

ARMILLARY DIALS. *See* p. 105.

ARMORIAL PENDANTS.

These small pendants, usually shield-shaped, though sometimes in the form of circles, lozenges, quatrefoils, &c., are furnished with a loop at the top for suspension. They are generally of bronze, enamelled with arms and devices by the champlevé process, the exposed parts of the metal being gilded.

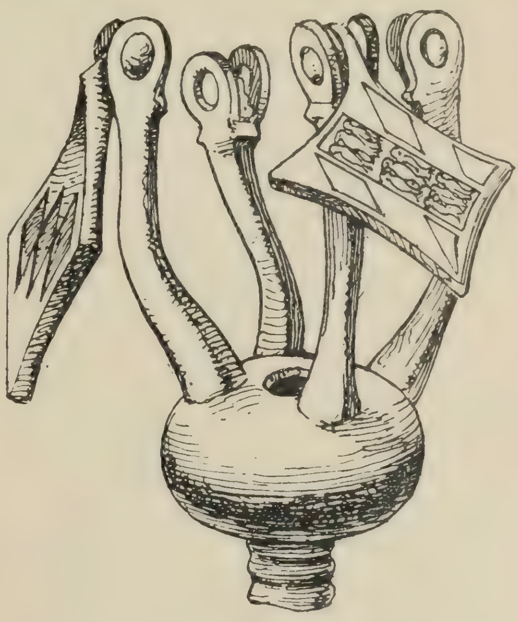


Fig. 53.—Bronze part of horse-trappinngs, showing use of armorial pendants, found at Salisbury. (Not in the collection.)

They seem to have been used in various ways. A bronze equestrian aquamanile or ewer of the thirteenth century belonging to the Carrand Collection in the Bargello at Florence, and a miniature in a manuscript in the Library at Trinity College, Cambridge, show that pendants of this kind were hung in a row along the peytrel, the band crossing the chest of a knight's horse. But they were sometimes attached to metal fittings of the kind shown in Wall-Case 34

(fig. 54), which in like manner appear to have formed part of the trappings of a horse.

Small enamelled escutcheons were also worn on the person by heralds, messengers, and dependants of princes or barons in order to show upon whose business they travelled. They would thus be analogous to the badges carried by Kings' Messengers in modern times (example of time of George III in Table-Case **L**). They further appear to have been worn upon the neck by knights

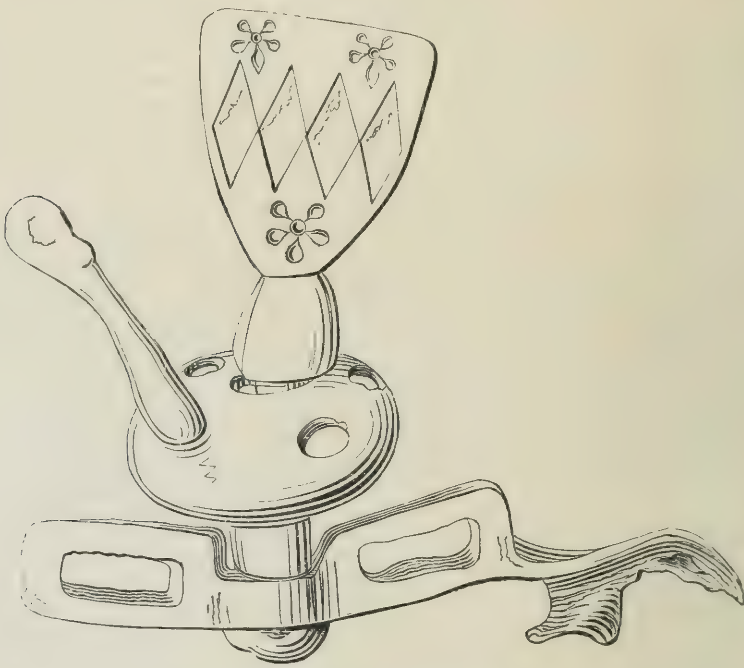


Fig. 54.—Bronze part of horse-trappings, showing use of armorial pendants.

about the end of the fourteenth century. A sepulchral effigy at Zürich, dating from about 1400, shows a knight wearing a small armorial shield upon his camail.

Armorial pendants were most common in the fourteenth and fifteenth centuries: they appear to have been made in different countries, especially in France and Spain. Several examples in the Museum series are Spanish, and were probably produced in Castile. The example in the middle of the bottom row of fig. 52 clearly shows its Spanish origin by the type of the vessel represented upon it.



Plate IV. Model Suits of Armour, early Seventeenth Century.

[See p. 3 .

ARMS AND ARMOUR.

(See p. 1.)

The collection of arms and armour in the Museum principally consists of the Meyrick and Burges Bequests: it is small and unrepresentative, the national collections being in the Tower of London and in the Wallace Collection at Hertford House, where ancient armour may best be studied in London. But there is one advantage in the presence even of a small series in a place like the British Museum. This lies in the opportunities there afforded for comparison not only with the armour of primitive tribes, but also with that of the various ancient civilizations, so that it is possible for a student to follow the evolution of weapons of offence and defence from the earliest stages of primitive culture down to the time of the invention of fire-arms. Thus in the Ethnographical Gallery there may be seen the weapons and means of defence devised by primitive man in many parts of the world, and in other galleries and rooms those of the great civilized peoples of antiquity. Body-armour is less frequently found among savage tribes than weapons of attack, but attention may be specially drawn to the elaborate suits of coco-nut fibre manufactured by the natives of the Gilbert Islands in the Pacific; to the interesting coats covered with fish-scales, worn in Borneo; to the brass breast-plates of the Basuto of South Africa, and to the corslets of wooden lath formerly used by tribes on the North-West Coast of America, probably as a result of intercourse with the Asiatic continent. Quilted or padded coats have been worn in widely distant parts of the world, for instance by the Ancient Mexicans, by the Baghirmi of the Western Soudan and the Arabs of its eastern extremity. Turning to civilized nations we may note that the Egyptians protected themselves with coats of woven and prepared flax, formed of superimposed layers, a light and practical defence after-

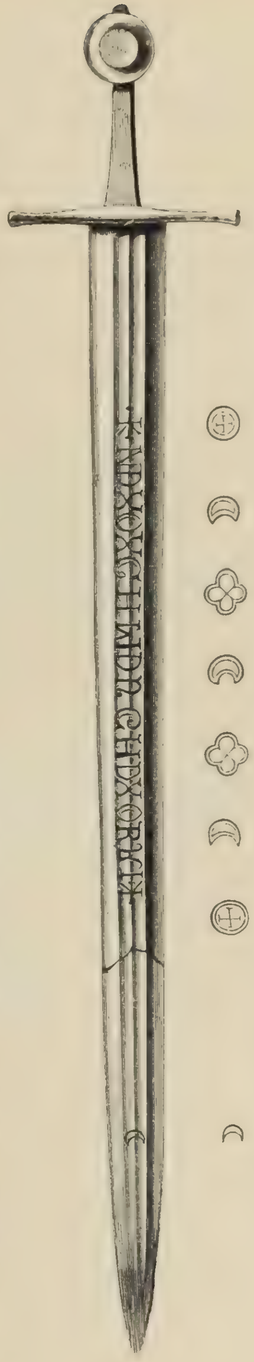


Fig. 55.—Inscribed sword found in River Witham, fourteenth century.

wards adopted by the Greeks and Romans, and similar in effect to the quilted armour mentioned above. The Greeks wore bronze corslets, in two parts (back- and breast-plates) moulded to the shape of the body, greaves covering the lower part of the legs, and metal helmets. The Etruscans and the Romans followed them in this, but the latter nation had also other varieties of body-armour, perhaps borrowed from the oriental peoples with whom they came in contact. Thus they wore leather or linen corslets covered with overlapping metal scales, a principle long in vogue among the ancient



Fig. 56.—Pommels of swords, twelfth to sixteenth centuries.

Persians and their neighbours in Central Asia, and exemplified in remains found in Graeco-Scythian tombs in Southern Russia as early as the fourth century B.C. Such armour was evidently of wide distribution in Inner Asia, and was made of various materials, the plates being not only of metal, but sometimes of other substances, such as pared horse's hoof; and its long persistence is proved by the fact that Tibetan soldiers fought in it against the British Expedition in 1905 (a suit in the Tibetan Section). The Romans also applied discs and rings of metal to a leather or linen basis, but it has been questioned whether the rings were connected in such a way as to form a true chain mail, though discoveries of such mail have been made under conditions which make a Roman origin possible. The Celtic inhabitants of Central and Western

Europe imitated in part the equipment of the peoples to the south of them: examples of their shields and helmets may be seen in the Central Saloon, and are described in the *Guide to the Antiquities of the Early Iron Age*, where the occasional adoption of metal scales and rings to protect the body is also noticed (pp. 124, 132). The Teutonic tribes who overthrew the Roman Empire went into battle without any protection upon the body or the head, relying for defence almost entirely on a wooden shield covered with hide and having in the centre a high iron umbo or boss (examples of such bosses in the Anglo-Saxon Room). But after the time of Charlemagne, the Frankish royal guard adopted the metal helmet, while in other divisions of the army a padded tunic covered with small pieces of metal was worn. It is thus apparent that before the period to which the term mediaeval is commonly applied, some of the better-known styles of protecting the body had already been adopted in principle: the scale, the ring, and the continuous metal plate had all been employed.

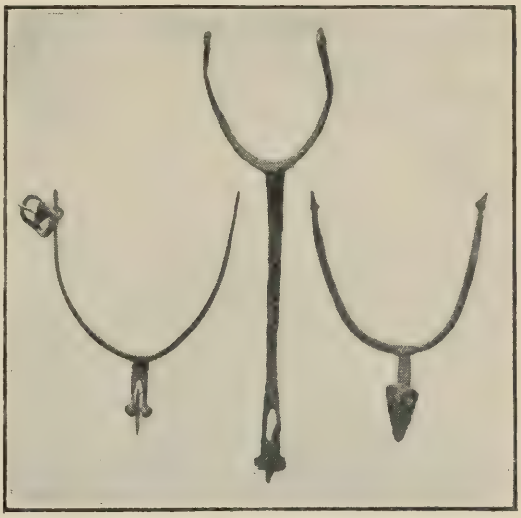


Fig. 57.—Spurs, thirteenth and fifteenth centuries.

During the Middle Ages, from the time of the Crusades to the sixteenth century, elaborate defensive armour was worn only by the mounted knights who formed the most formidable part of the feudal army. Their retainers, who fought on foot, were often indifferently armed, and without uniformity of equipment until organization was improved on the establishment of trained bodies of archers; the early armour and weapons seen in museums are therefore for the most part those of knights. The main outlines of development down to the introduction of fire-arms may now be briefly indicated.

Norman armour is known to us through the representations upon the Bayeux tapestry. The body was protected by a long narrow shirt or hauberk of leather or woven stuff covered by metal rings, which were either sewn separately to the surface, as the rendering of the tapestry would appear to indicate, or else interlinked so as to form a genuine mail. It will have been gathered from what has preceded that there is some uncertainty

as to the date at which genuine mail was introduced. It is possible that it was already known in the East about the time of the Christian Era, and that the Romans were acquainted with it; it is equally possible that the Normans knew how to make it, for the Bayeux pictures, in which the rings are seen in isolation, are executed in a very conventional style. Until, however, pieces of such mail of a date anterior to the twelfth century are discovered under unimpeachable conditions the point cannot be finally decided. The long Norman hauberk was slit at the bottom, so that the lower halves might be wrapped round the legs when the rider was

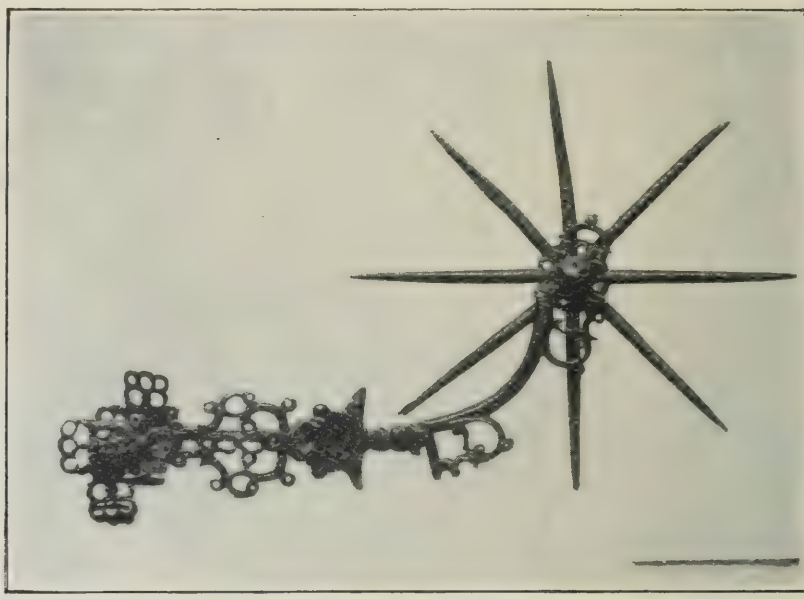


Fig. 58.—Spur, sixteenth century.

mounted. The lower legs seem as a rule to have been protected only by some form of bandaging, as had been the case in Carlovingian times. The shield was usually very long, rounded at the top and pointed at the bottom.

During the period succeeding the Norman Conquest down to about A.D. 1200 many changes were introduced, but the principal point to notice is that armour was now made throughout of flexible mail. The hauberk was fashioned entirely of interlinked rings, so as to be independent of any leather or woven basis: it had long sleeves, to which mittens were ultimately added, and a hood or coif to be drawn over the head. In one form or another this mail-coat continued in use down to the beginning of the fifteenth century, and even then it continued for a time to be worn under the plate armour. In its earliest form it was gathered in at the waist by a belt, and under it was worn a tunic

called a *gambison* or *haqueton.* The alteration in the fashion of the hauberk followed a change in civil dress, and it should be noted that alterations in armour frequently accompanied such changes: the coifed hauberk of the twelfth century was, in fact, the woollen dress of the period translated into mail, as the earlier Norman hauberk had been little more than a shirt stiffened so as to withstand thrusts or blows. As the period advanced, the legs were covered with mail *chaussons* above the knee, and below it with *chausses,* which were made to cover the feet. The sword-belt, which had been worn over the right shoulder, was changed to the waist. Down to the close of the twelfth century a tight-fitting head-piece was worn over the mailed hood or coif; but about the year 1180 it was replaced by a great cylindrical, flat-topped helm, so large that its lower edges actually rested on the shoulders to the serious risk of the collar-bone. This cumbrous helm, which was furnished with slits for the eyes, was carried suspended by a chain from the saddle-bow, and only put on at the moment of going into battle. It was succeeded in the last quarter of the thirteenth century by helms with rounded or pointed tops, sometimes with a movable visor, and occasionally with a broad rim. Towards the middle of this century exposed places, such as the joints at the elbows and knees, began to be covered by small plates (*coudières* and *genouillères*) of iron or cuir-bouilli. About A.D. 1275 little wing-like appendages (*ailettes*) were attached to the shoulders, and were destined to remain in use more than fifty years: about the same time greaves (shin-guards) of leather or metal were worn. Towards A.D. 1300 the principle of strengthening the mail by secondary defences of plate entered upon a wider development: the whole fourteenth century was in fact a period of transition and experiment in this direction. By degrees plates were added to defend the arms, discs or roundels were fixed over the shoulder and elbow-joints, and gauntlets were introduced. The cumbrous helm was very largely superseded by a lighter helm called the *bascinet,* which was in general of a globular form terminating in a point, though admitting of many variations, especially in the shape of its movable visor. As it did not descend nearly so far as the helm, it became necessary to provide a new defence for the neck and shoulders, which was effected by attaching to its lower rim an appendage, something like a tippet, usually of mail, and known as the *camail.* In England, where visors were not always adopted, the helm was long retained and worn above the bascinet, which continued in use, with the camail, until the beginning of the fifteenth century: after that the camail was replaced by a steel gorget to protect the throat, a defence which had been known some years earlier. Crests upon the helm were general in the fourteenth century.

Although plate additions were now so general, some knights

appear to have long neglected them, but towards the close of the fourteenth century breast-plates and corslets came into use, while laminated shoulder-pieces and elbow-guards were substituted for the earlier roundels. The overlapping narrow plates attached to the lower part of the corslet, and forming, as it were, a short metal skirt, were called in France *faudes*, and in England *taces*. From about the middle of the fourteenth century the feet were protected by *sollerets* of articulated plates, pointed at the toes. In the first half of the fifteenth century the transition to complete plate-armour was accomplished ; modifications henceforward took the form of small additions to give greater local strength, and changes were often little more than extravagances of fashion. With the sixteenth century, armour became more massive and was often elaborately enriched and ornamented. The pointed sollerets were superseded by broad-toed *sabbatons*: plumes replaced the crests upon the helms. The *salade*, a close metal cap covering the sides of the face and back of the neck, which had been introduced about 1400, continued to be worn in the sixteenth century (Italian example on shelf in Wall-Cases 4 and 5). To the end of the period of defensive armour belong the flexible coats made of small riveted plates concealed beneath a covering of stuff known as *brigandines* or *jazerine jackets* (Wall-Cases 6 and 7).

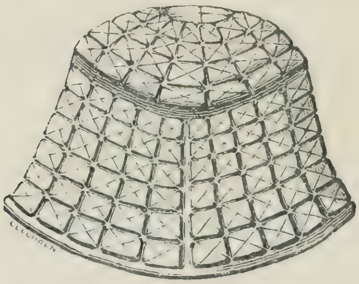


Fig. 59.—Brigandine cap, from Davington Priory, Kent.

The use of fire-arms rendered armour ineffectual as a protection, and its use was gradually discontinued. After about A.D. 1600 buff leather was worn by the soldier, though breast- and back-plates and iron head-pieces were used throughout the century. By about A.D. 1700 the few pieces of armour which remained had become purely ornamental, and in this capacity they have survived to our own time in the uniforms of our Life-guards.

The following brief notes concern individual parts of the equipment of knights and foot-soldiers in the Middle Ages.

Surcoats, &c. Through the greater part of the period a garment of woven stuff was worn over the armour, varying continually throughout the centuries. In the thirteenth century it was a long surcoat with sleeves. This was replaced in England about 1325 by the *cyclas*, laced at the sides and much shorter in front than behind. This was a fashion of short duration, and by the middle of the century the surcoat falling to the knees was in common use. In the latter part of the century came in the short tight *jupon* without sleeves, almost always blazoned with arms. By the beginning of the fifteenth century the custom of wearing a textile

garment over the armour had grown less usual, but down to A.D. 1450 a very short surcoat called a *tabard* was worn in England.

Shields in Norman times were long, rounded at the top, and pointed at the bottom ('kite-shaped'). But in the twelfth century they were already approximating to a shorter triangular form, though the surfaces were at first convex and the tops still rounded. By the first half of the fourteenth century shields were almost flat ('heater-shaped'), and straight along the top. Early in the fifteenth century the prowess of archers led to the introduction of a large convex, rectangular shield, called the *pavise* or *mantlet*, which rested on the ground and covered the whole person of the knight when on foot. With the perfection of plate-armour and the introduction of fire-arms, shields became obsolete. The so-called 'shields of parade', made of light materials painted and decorated, were only intended for display at tournaments. The example shown in fig. 60 is of the period of Edward IV.

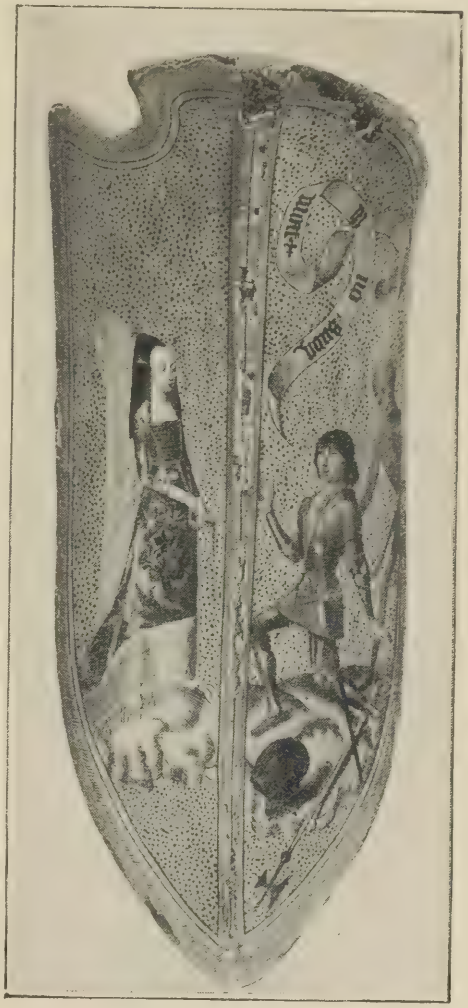


FIG. 60.—Shield of parade. French, fifteenth century.

Sword-belts, as already mentioned, were originally worn over the shoulder; but from the thirteenth century the sword was attached to a baldric fastened to the right side of a belt worn round the waist and hanging obliquely over the left thigh. At the close of the fourteenth, and the beginning of the fifteenth century, belts were adorned with highly decorated clasps or buckles, and one of the ends hung down before the body as far as the knees.

Spurs (figs. 57, 58). The earliest *spur* was the straight prick-spur with a single point such as the Romans wore, and this was in general use down to the thirteenth century, when spurs with

revolving rowels (*roulettes, molettes*) begin to occur. The latter type became predominant in the fourteenth century, though in the first half of it a few prick-spurs are still seen on English sepulchral monuments. At the end of the fourteenth century and during the greater part of the fifteenth, spurs were of exaggerated length, accompanying the sollerets with very elongated toes. The reason for this lay in the use of a bulky horse-armour which rendered the flank inaccessible to a short spur. The enormous rowels with very long spikes belong to the sixteenth century, and were carried by the Spaniards to Central and South America, where the form still survives.

Horse-armour was used in England from the thirteenth century down to the seventeenth. The pieces protecting the horse were generally known as *bardings*, and were of various materials from mail and leather to plates of steel. When not of metal they commonly bore heraldic devices.

Swords throughout the mediaeval period were straight and two-edged, with cross-hilts, though the form of the pommel varied with the centuries (figs. 1 and 56). Curved guards and basket-hilts are not earlier than the sixteenth century.

Daggers were worn throughout the Middle Ages. The variety known in France from about A. D. 1200 as the *miséricorde* is constantly seen on English monuments from the earlier part of the fourteenth century.

The *mace*, a metal development of the club, was in common use through the Middle Ages. A very general form had a bladed or flanged head, and this was the type at first carried by the royal sergeants-at-arms. By degrees these maces became purely ceremonial and ornamental; the button at the lower end, which was engraved with the royal arms, became the larger and more important end, and by the close of the fifteenth century was carried uppermost; the flanges, which formed an inconvenient handle, gradually disappeared. These maces were now always made of precious metal. The maces of civic sergeants-at-mace were copied from the royal maces, and in the thirteenth and fourteenth centuries were doubtless like those used in battle. None of these early examples have survived; but of the fifteenth century and later, when the button end had become all important, some five hundred remain. About 1650 the use of great civic maces increased, while a smaller number of sergeants' maces were made. There are some ninety great civic maces of the seventeenth and eighteenth centuries in existence in England.

Lances of tough wood with unbarbed iron points continued in favour through the Middle Ages: to them were attached the knight's swallow-tailed pennons. The rectangular banner was only carried by nobles and important persons.

Bows. The mediaeval *bow*, for the use of which the English

archers became especially famous, was a 'self-bow', usually of yew, about five feet long, with arrows barbed at the points: it was effective at a range of about 250 yards. The short oriental weapon with counter-curves, and made of plates of horn and sinews glued together, was not favoured in the West. Its principle was, however, sometimes adopted in cross-bows.

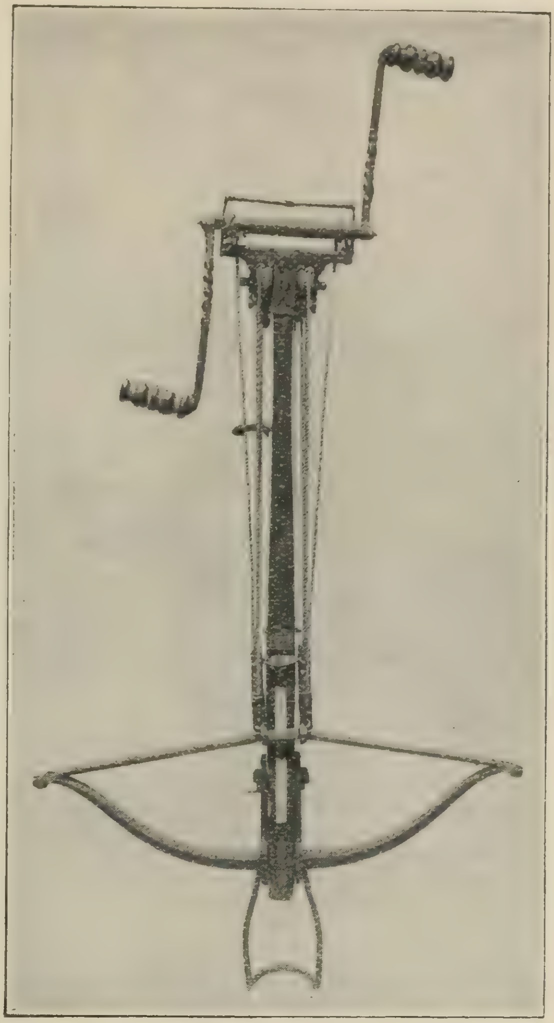


FIG. 61.—Cross-bow, sixteenth century.

The *cross-bow* (fig. 61), though apparently known as early as the fourth century, and mentioned in tenth-century MSS., does not appear in general use until the twelfth century, and even then it was placed under an interdict as a barbarous weapon: it is not seen in the Bayeux tapestry. By the fourteenth century it was made of such strength that it had to be bent by various mechanical appliances. The cross-bow fell into disuse after the invention of the arquebus.

Fire-arms. Cannon were first used in the fourteenth century. Before that time various forms of large mechanical catapults had been employed. A transition between the cannon and the hand-gun is seen in the portable culverins already in use in the fourteenth century. But the matchlock *arquebus,* the first weapon which could be rapidly wielded by a single man, was invented in Spain in the first half of the sixteenth century, to be quickly followed by the heavy musket supported upon a forked rest. Towards the middle of the sixteenth century, the wheel-lock principle, in which the powder was ignited by a spark struck from a flint, was adopted in Germany. As a result, the pistol was soon afterwards invented (fig. 62).

Heraldry. The development of heraldry is of course far too vast a subject to be treated in a Guide of this nature, but a few simple facts illustrating the connexion of heraldic devices with knightly equipment may be inserted in this place. Heraldic devices appear upon seals in the last third of the twelfth century, and in England were already established in the early part of the thirteenth century; from that time armorial devices were continuously blazoned upon shields and pennons. The expression coat-of-arms is derived from the external garments of the nature of the surcoat or jupon worn above the armour, and shield-of-arms from the shield, on both of which the armorial insignia were displayed. The crest,

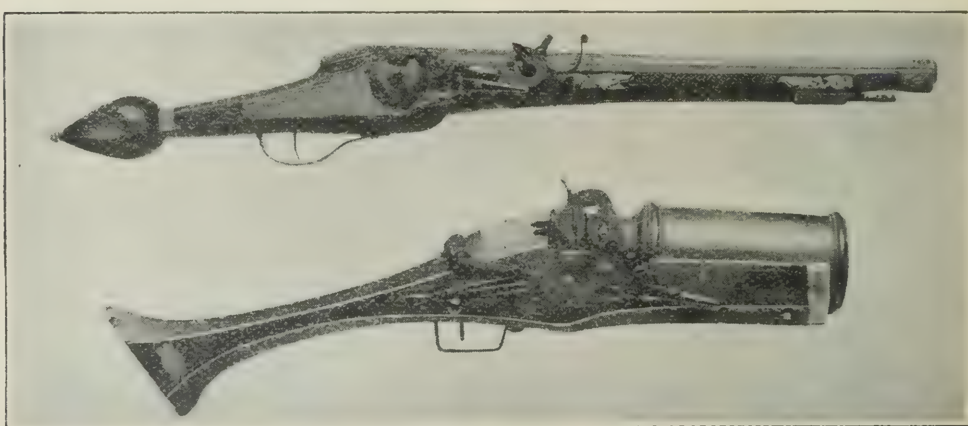


FIG. 62.—Wheel-lock pistol, 1607; hand-mortar for firing grenades, sixteenth century.

as already stated, was originally associated with the helm, and was finally attached to a coronet or wreath encircling it. Crests were at first restricted to persons of high rank or importance. They rapidly multiplied in the fourteenth century, and were often of a very elaborate nature, being frequently constructed of cuir-bouilli (see p. 96) or some light but durable material. The badge, a figure or device adopted as the cognizance of a person or a family, differed from the crest and from the charge upon a shield in having no connexion with either shield or helm.

In the thirteenth and fourteenth centuries the forms of heraldic shields usually followed those of shields actually in use in war. With the Renaissance, other forms were adopted. In Italy a form in outline resembling a horse's chamfron was popular in the fifteenth century, while in Germany at the same period the blunt-based jousting-shield with curved sides and slit for the lance was freely used. Oval shields are very rare before the sixteenth century. The lozenge form was generally adopted by ladies as early as the thirteenth century.

ASTROLABES.

The Astrolabe is an instrument chiefly used for taking the altitude of the sun or stars at sea. The name is derived from two Greek words meaning 'star' and 'to take'; and the astrolabe was well known to the Greeks, though under a form resembling that of the later armillary sphere, with separate rings for the Equator, Ecliptic, and other principal circles of the sphere. The earliest instrument of this kind was made by Hipparchus in the second century B.C., but Ptolemy, the geographer and astronomer of Alexandria (A.D. 140–160), reduced the astrolabe upon a plane surface, whence it was afterwards known as the planispheric astrolabe. This is a stereographic projection of the circles of the sphere upon the plane of one of the great circumferential lines, like the Equator. The instrument was adopted and perfected by the Arabs, who re-introduced it into Europe about the tenth century, and have continued to use it down to our own day. Many of the finest and most ancient specimens are of oriental construction, and of these the Museum possesses more than one (plate V and Wall-Cases 24–26). Some of the most famous examples are preserved at Madrid and in Florence.

The planispheric astrolabe consists of a heavy circular metal plate with a ring at a point in the circumference, by which it can be suspended from the thumb. On the back are engraved a number of concentric circles, the outer always the same, the inner subject to variation in different instruments. Reading from the larger to the smaller, we find the first marked with the degrees into which the quadrant of a circle can be divided, then with the signs of the Zodiac, the days of the year, the names of the months, and the days of each, the Saints' days (in Christian astrolabes) with their Sunday letters. In the lower half of the space within these circles is a scale like a protractor, the horizontal limb of which is twice as long as the vertical limbs, and divided into twenty-four parts, while each vertical limb is divided into twelve parts: this is the scale of *umbra recta* and *umbra versa*, for taking the height of terrestrial objects. Through the centre of the back run two diameters crossing each other at right angles, the ends marking the four points of the compass. The *front* is a sunk surface with a raised rim or border running round it, on which are engraved three circles, the outer with twenty-four letters representing the hours of the day, the two inner four series of ninety degrees each for the four quadrants. On the sunk central part of the plate (the 'moder' or 'mother') are engraved three circles for the tropics of Cancer and Capricorn and the Equinoctial, together with two diameters crossing each other at right

angles, the ends marking the four cardinal points. In the same depression are usually fitted one or more circular plates or *tables*—sometimes as many as nine—differently marked for use in places situated in different latitudes. Each has engraved upon it, in stereographic projection on the plane of the Equator, the meridian line, the line of intersection of the Equinoctial with the plane of the horizon, the tropics of Cancer and Capricorn, the Equinoctial, circles of altitude from the horizon to the Zenith, circles of azimuth passing through the Zenith, and other circles. Above the tables fitted an openwork plate of varying design called the *rete* (net) representing a portion of the celestial sphere. It contains a small circle, the outer edge of which represents the Ecliptic, engraved with the months and days and with the signs of the Zodiac. From the interior and exterior of this circle issue branching limbs, having pointers on their extremities and sides, each marking the position of an important star. At the back of the astrolabe, on the central pin holding all the parts together, revolved the *rule* (*alidade*), fitted with sights; on the front was the *label*, of somewhat similar form.

When used, the astrolabe was suspended from the thumb by the ring in its edge, and altitudes were taken by the sights in the rule; the *rete*, tables, and circles of degrees served for various astronomical observations. By the *umbra versa* and *umbra recta* heights of objects upon the earth were determined, the former indicating the height in inches of the object for each foot of horizontal distance, the latter the height in feet for each inch of horizontal distance. The most important use of the astrolabe was at sea, and it was employed for nautical observations until the eighteenth century, when it was superseded by the reflecting quadrant and the sextant. Incidentally it served for telling the time of day, and is still used in the Mahommedan world for determining the hours of prayer and the position of Mecca. A most interesting account of the astrolabe will be found in Chaucer's works, where the poet describes the instrument for the benefit of his little son.

The astrolabes with historical associations exhibited in Table-Case A deserve attention: one, made by Humfrey Cole, in 1574, belonged to Henry, Prince of Wales. Those who are interested in these instruments should not fail also to examine the collection in the Lower Gallery of the Science Collections at South Kensington, where there is also a fine series of other early astronomical instruments.

BACKGAMMON. *See* p. 137.



PLATE V. ENGLISH ASTROLABE, ABOUT 1260.

[*See* p. 67.

BADGES AND SIGNS.

The badge is a device distinct from a crest, and having no necessary connexion either with the helm or shield. An individual or family might have more than one badge, but one of these was usually a well-known device worn by members of his household as a distinguishing mark, either worked upon their garments or applied to them. A few examples of the latter class are shown in Table-Case **B**, including the Bear and Ragged Staff borne by retainers of the Earls of Warwick, the Hound (talbot) of the Earls of Shrewsbury, and the 'Hart lodged' of King Richard II.



Fig. 63.—Canterbury pilgrim's sign, with ampulla.

Among the most interesting badges are the pilgrims' signs (*signacula*), made of lead or white metal, distributed at the famous shrines to pilgrims, and worn by them on their hats and garments as a proof of their journey: the devices which they bore were such as obviously to suggest the saint or the shrine. The two most important places of pilgrimage in England were Canterbury (for the shrine of Thomas à Becket) and Walsingham Priory in Norfolk, where Our Lady of Walsingham was venerated; while in France, Boulogne and Amiens were particularly frequented by our countrymen. Places of pilgrimage abounded in various parts of Europe, perhaps the most famous of all being the shrine of St. James at Compostella in Spain, the sign of which was the scallop shell. The wearing of signs is mentioned in many early works, notably in Langland's *The Vision of Piers Plowman* and in Chaucer's *Canterbury Tales*.

The collection contains a good series of pilgrims' signs, consisting either of medallions, plaques, brooches, ampullae (small flasks), &c., with designs in low relief, or actually taking the form of saints' attributes (selection in Table-Case **B**, figs. 35–6 and 63–6).

Among the subjects are the figures of St. Thomas, and a bell (the Canterbury bell) from Canterbury, the Virgin and Child (Walsingham), Our Lady of Boulogne, the head of St. John the Baptist (Amiens), the Vernicle with the head of Christ (Genoa), the scallop shell (Compostella and Mont St. Michel), the horn of St. Hubert, the axe of St. Olave, the comb of St. Blaise, and others. With these is a stone mould for casting equestrian figures of St. Thomas à Becket (fig. 66). Another stone mould for casting signs was discovered at Walsingham, near the parish church. It is engraved on one side with a row of identical designs, each consisting of a circular band containing a six-pointed star in the centre of which is a medallion of the Annunciation: on the other side are two representations of the same design, each transfixed by a large arrow. Another mould (now in the Lynn Museum) was dredged from the Ouse at Lynn. It has on one side IHC, and on the other three concentric circles transfixed by an arrow.

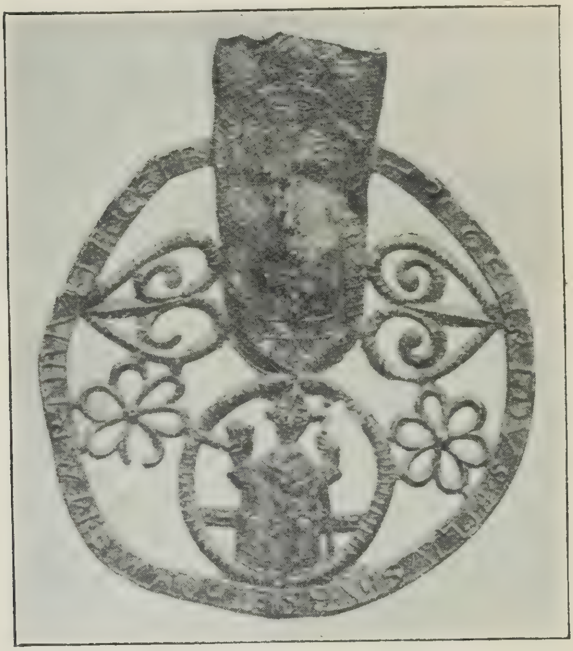


Fig. 64.—Canterbury pilgrim's sign, with ampulla.

Pilgrims' signs seem to have first become general in the thirteenth century, and the majority date from the two centuries following. Some have been found near the shrines to which they refer, but the greater number have been dredged up from rivers, especially the Thames and the Seine. The examples in the Museum chiefly come from the Roach Smith Collection and were found in the Thames. A fine series from the Seine is in the Musée de Cluny at Paris.

BASINS. *See* p. 130.

BASCINETS. *See* p. 61.

BELTS. *See* p. 63.



FIG. 65.—Pilgrim's sign: St. Thomas à Becket.



FIG. 66.—Stone mould for casting sign of St. Thomas à Becket, with impression taken from it.

BEZOAR STONES.

These are concretions formed in the stomach of the Indian gazelle, antelope, lama, boar, monkey, camel, and other animals; they are formed in close concentric layers, consisting of grass, hairs, and fine filaments. Down to the eighteenth century the bezoar was considered to possess medicinal and antiseptic properties even in Europe, and in the East its external application is still regarded as a sovereign remedy for the bites of serpents or scorpions. Bezoar stones are as a rule about the size of a pigeon's egg, and weigh from one to three or even four ounces. They vary in colour, and have an exceedingly lustrous surface. They had a high pecuniary value, and were often mounted in the precious metals and worn round the neck suspended from gold chains.

BOMBARDS. *See* p. 181.

BONE SKATES.

These implements were fastened to the soles in much the same manner as metal skates; but as they had no cutting edge, the wearer was obliged to carry a stick shod with an iron point, by means of which he propelled himself forward: each skate was generally made from the tibia (leg-bone) of a horse.

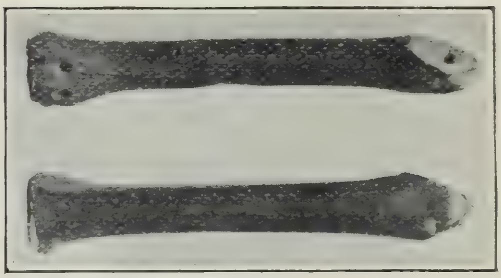


Fig. 67.—Bone skates.

Fitz-Stephen, writing in the time of Henry II (1154–1189), describes the citizens of London as skating in this manner at Moorfields, where some of the examples in the Museum collection were discovered. Bone skates seem to have been very general in the North of Europe, and were still to be found in use down to comparatively modern times.

BOWS. *See* p. 64.

BOXWOOD MEDALLIONS AND CARVINGS IN HONESTONE.

Table-Case F.

Until about A. D. 1527 Germany did not follow the Italian example of casting portrait-medals to any great extent, and the fashion was practically unknown until A. D. 1510. Instead of medals intended to be mechanically multiplied, important and

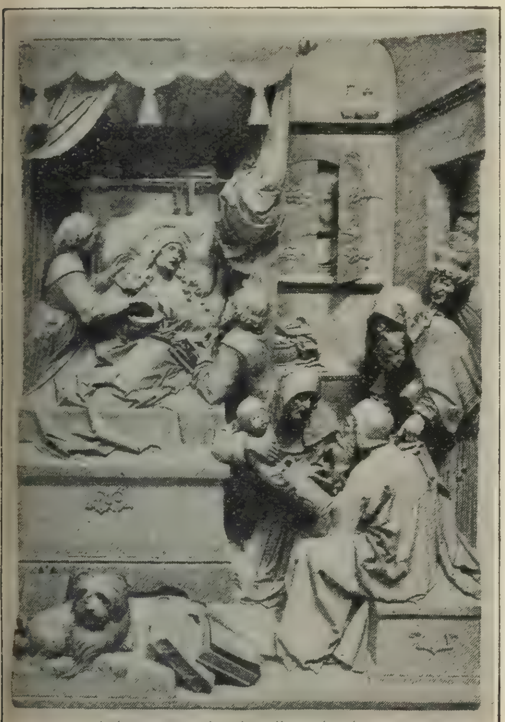


FIG. 68.—Honestone carving, German, sixteenth century.



FIG. 69.—Honestone portrait of Joh. Klanmülher, German, sixteenth century.

wealthy persons in Germany had their portraits carved in pearwood, boxwood or honestone. These works of art were not designed for reproduction, though sometimes used for that purpose, and the earlier examples are without inscriptions, which were added if required by means of letters applied by glue, or even impressed by the use of printers' type. Among well-known artists in boxwood and honestone were Schwarz, Hans Daucher, Ludwig Krug, Peter Flötner, and Friedrich Hagenauer. It is unlikely

whether the honestone panels with Dürer's monogram (e.g. fig. 68) were actually executed by that artist.

BRACELETS. *See* p. 171.

BRASSES.

It is probable that in England, France, and the Low Countries brasses began to replace the older effigies during the first half of the thirteenth century. The earliest existing brass is at Verden in Hanover, to Bishop Ysowilpe, who died A.D. 1231, but the oldest surviving example in England is that of Sir John d'Abernon the elder, who died in 1277, and is buried in the church of Stoke d'Abernon, Surrey. England is now the only country in which brasses have been preserved in any great number. France lost hers in the sixteenth century and during the Revolution, and comparatively few remain in Flanders and Germany. German and Flemish brasses differed from our own in being usually formed from large plates of metal with a diapered background to throw the figures into relief: in England smaller figures, escutcheons, architectural canopies, and inscriptions were separately inlaid in large slabs of grey marble or other stone so as together to form one composition. The fine head of a bishop in the Wall-Case (fig. 70) illustrates the continental style; while the small figures and shields are all derived from English tombs (figs. 71–3). Brasses are most numerous in the Eastern Counties, because in the Middle Ages this part of England had been greatly enriched by commerce: a certain number were doubtless imported from Flanders, but the majority were made at home. On the completion of a monument, the surface of the brass was burnished and the engraved portions commonly filled with a black or coloured composition: in rare instances armorial shields have been ornamented with true enamel, as for example, the shield of Sir John d'Abernon mentioned above.

The so-called *palimpsests* are of two main classes: (1) brasses in which new dates and inscriptions have been given to old figures either left in their original state or modified; (2) brasses in which the plain reverse has been engraved with a new figure or inscription. the earlier figure on the other side being left undamaged except in so far as it may have been mutilated by the cutting up of the plate into smaller pieces. Mr. Mill Stephenson, who has catalogued the palimpsest brasses in England, would describe the first of these classes as appropriated and converted brasses; the second class he subdivides into wasters from the workshop, and spoils from the destruction of religious houses and chantries. To illustrate the anachronisms caused by the appropriation of brasses, the example at Bromham in Bedfordshire may be quoted, where a man in armour

and his two wives in the costume of about the year 1430–1440 have been re-named Sir John Dyve (d. 1535), his wife and mother.

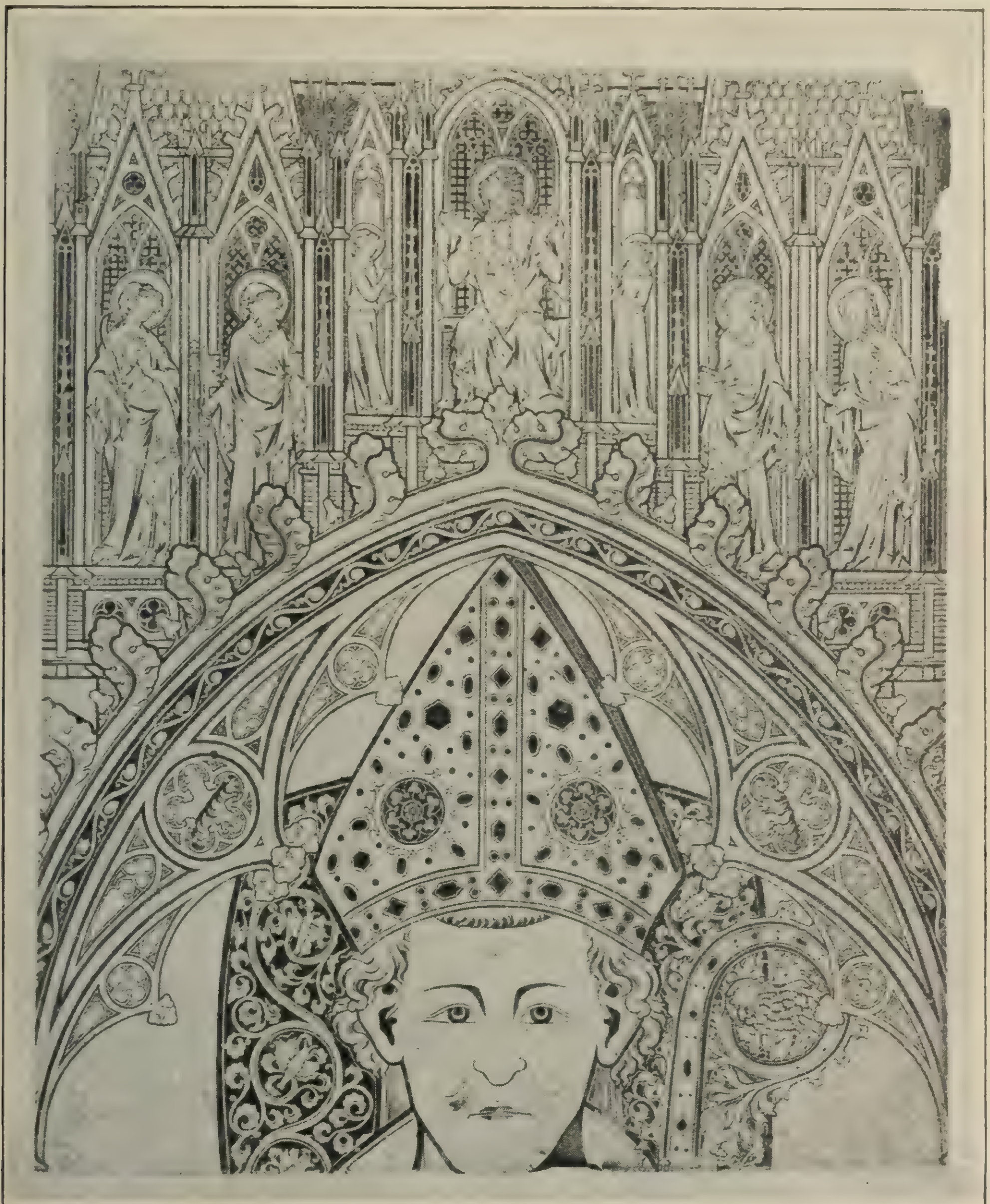


Fig. 70.—Monumental brass: head of a bishop, Flemish, fourteenth century.

The second class is much the most numerous, and to it the various small examples in the Museum collection belong. Palimpsests due to mistakes on the part of the workmen, or to the dissatis-

faction of the person ordering the monument, are frequently earlier than the Reformation, and in these the dates of the work on the two faces are not far removed from each other. On the other

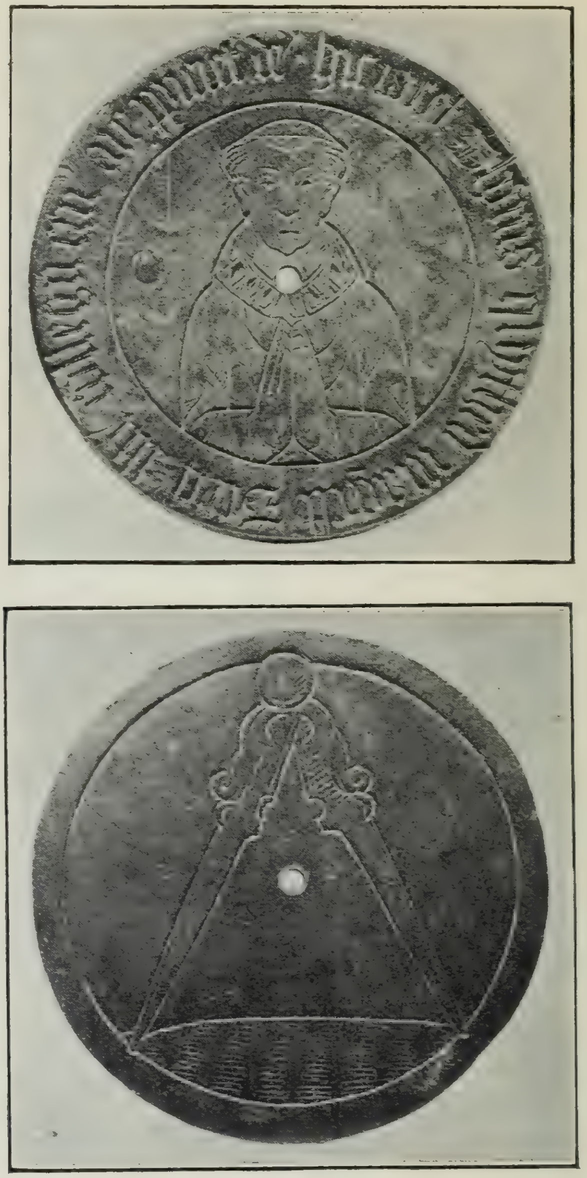


Fig. 71.—Palimpsest brass: Thomas Quythed, about 1460, and pair of compasses, seventeenth century.

hand, in palimpsests which result from the re-use of much earlier monuments, the later surface is rarely earlier than the second half of the sixteenth century and frequently much later. A great deal of brass was imported into England from the Low Countries, for

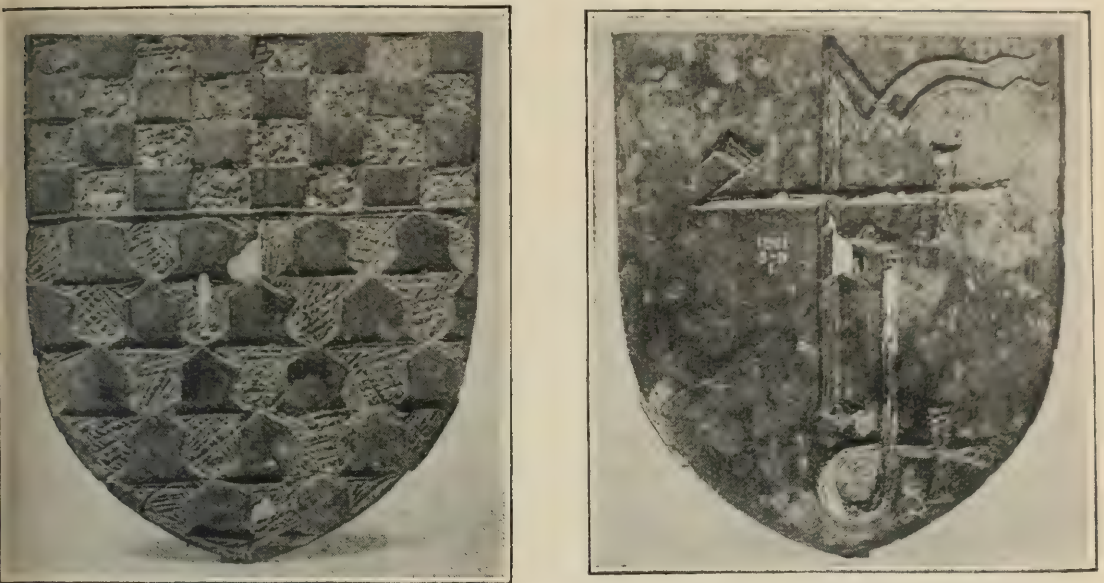


Fig. 72.—Palimpsest brass: arms of Fitzadrian, late fifteenth century, and merchant's mark, sixteenth century.



Fig. 73.—Fragment of a monumental brass: part of the figure of a man wearing a tabard with the arms of Fitzwilliam, about 1550.

brass plate does not seem to have been made at home until Elizabeth's time, and amongst the Flemish importations were many old brasses already engraved, probably pillaged from churches in Flanders and Brabant during the religious troubles of the latter part of the sixteenth century.

Apart from their artistic merit and their historical importance, sepulchral brasses are of very great value for the study of the armour and costume of the classes able to afford such monuments. It is interesting to note that brasses have been reproduced since the early part of the nineteenth century. At first regular prints were made with printing-ink, giving reversed results; a series of such prints made by Mr. Craven Ord and Sir John Cullum was presented to the Museum soon after Mr. Ord's death in 1830, and is now in the Department of Manuscripts. From these we may see how easily the process of printing might have been invented in the fourteenth century (see p. 216), if it had struck a brass-engraver to take proofs of his work as the niello-workers did at a later period in Italy. The easier and more satisfactory process of rubbing with heel-ball (a compound of beeswax, tallow, and lamp-black) has since been preferred, and innumerable rubbings so made are in existence. A fine classified collection, formed by the late Sir Wollaston Franks, is in the Library of the Society of Antiquaries at Burlington House.

BRAZIERS.

In the fifteenth and sixteenth centuries small bronze braziers were used for keeping dishes hot for the table. Possibly the examples in Wall-Cases 17 and 18 were intended for this purpose.

BRUSHES.

Hair-brushes are mentioned in a document of 1402, but no existing examples are likely to be earlier than the sixteenth century. Combs on the other hand are of very great antiquity.

BULLAE. *See* p. 191.

BUTTONS. *See* p. 171.

CABOCHONS. *See* pp. 169, 201.

CAMAIL. *See* p. 61.

CAMEOS. *See* pp. 28, 48, 142.

CANDLESTICKS

Though the pricket continued to be used to a late period, especially in churches, the portable candlestick with a handle and socket had been known from Roman times. Socketed candlesticks were certainly used in the fourteenth century, and a fine example



Fig. 74.—Enamelled pricket candlesticks, Limoges, twelfth and thirteenth centuries.

was exhibited at a meeting of the Society of Antiquaries of London in 1872. Candlesticks in the precious metals do not seem to have been made in England until the reign of Charles II. The large enamelled brass candlesticks (Wall-Cases 31 and 32 and fig. 98) are also English work of the seventeenth century.

CARDS, PLAYING. *See* p. 137.

CAUDLE-CUPS. *See* p. 102.

CENSERS, or Thuribles.

The use of censers in the Christian Church goes back to very early times. Constantine is said to have presented two of gold to the basilica of the Lateran, and at Mannheim there is preserved an example probably dating from the fifth century. Some of the earliest censers had handles and no chains, but in the Mosaics of Ravenna we already see representations of suspended thuribles. These are open cylindrical or hexagonal vessels without lids, as was usual in the Byzantine churches, and were analogous to the silver example of the sixth century from Cyprus shown in the Christian Room (Wall-Cases 9 and 10): the later Byzantine censer was generally an open cup-like vessel on a high foot. In the West, down to about the eleventh century, the censer was simple in outline and sometimes spherical; but in the Romanesque period the lids assumed an architectural form and were ornamented with towers and battlements: the manufacture of such a censer is described by Theophilus (or Rugerus), the author of the *Diversarum artium schedula,* a most valuable treatise on the processes used in the industrial arts dating from the twelfth century (English translation by R. Hendrie). This fashion continued through the Middle Ages, the architectural forms varying with the Gothic styles, and in the fifteenth century becoming exceedingly elaborate,



FIG. 75.—Bronze censer, fourteenth century.



PLATE VI. ENGLISH CHALICE, THIRTEENTH CENTURY. SIENESE CHALICE, FIFTEENTH CENTURY. ENGLISH COMMUNION CUP, MADE ABOUT 1570.

[See p. 82.

with finely designed traceries reproducing those of contemporary windows. The idea underlying all these developments was the representation of the Heavenly Jerusalem ; and it is an interesting point that some of the very earliest architectural censers were made in this country. The top of a censer fashioned to resemble the tower of a late Saxon church is of the twelfth century or possibly even earlier ; it was found in the Thames near London Bridge (Wall-Case 29). Many censers used in royal Chapels and in Cathedrals were made of gold and silver, but the early examples of these have disappeared.

CHAINS. *See* p. 171.

CHALICES.

The word *chalice* is derived from the Latin *calix*, the cup-shaped envelope of the flower.

Down to the tenth century chalices usually had two handles,



Fig. 76.—Funeral chalice and paten, from Old Sarum, thirteenth century.

their type being that of the ancient *cantharus*. But there are exceptions to this rule, the curious chalice from Trewhiddle, near St. Austell (Anglo-Saxon Room, Wall-Case 22), which dates from about A. D. 900, being a good example from this country. In the tenth and eleventh centuries the cantharus form and the type without handles are both found, and the handles do not altogether disappear until about the end of the twelfth century. The bowl

in the early chalices was hemispherical, and this continued during the thirteenth century (chalice from Berwick St. James, Wiltshire, in Wall-Case 30, plate VI); but in the fourteenth century the shape became more conical. At the same time the stem and knop tended to become prismatic, while the foot, formerly circular, was made angular or divided into lobes: on the lobe or compartment which the priest held towards him was engraved a cross or the Crucifixion. These changes may have resulted from the laying of the chalice on its side upon the paten, for the form with the smaller bowl and angular foot would not roll in the same manner as the large round-footed cup. From the sixteenth century, chalices with very elaborate ornamentation were made, some of the most sumptuous but at the same time the least tasteful examples being produced in Spain and Portugal. Byzantine chalices, of which there are numerous examples of the eleventh and twelfth centuries in the Treasury of St. Mark's at Venice, were sometimes of enormous size: they are found both with and without handles, many being of crystal and agate or other stones, with metal mounts. A silver chalice of the Earlier Byzantine period without handles is exhibited in the Christian Room (Wall-Case 4).

In England, after the Reformation, the Communion-cup replaced the chalice. The earliest examples date from the reign of Edward VI, but most are of the time of Elizabeth. All are very similar, the bowl being high and beaker-shaped, and the small paten when reversed forming a cover of which the low foot serves as a handle (see examples in Wall-Case 30 and plate VI): this form of cup was in many instances continued down to the Commonwealth. In the thirteenth and fourteenth centuries chalices and patens of silver or pewter were often buried with ecclesiastics, and usually placed over the breast (examples in Wall-Case 30, fig. 76). On some sepulchral brasses, as at North Mimms, Wensley, and Higham Ferrers, the chalice is represented in this position.

In the early Church, chalíces of glass and even of wood and horn had been used, bronze more rarely, and chiefly in Ireland. But the precious metals had almost from the first been the usual material, and their use was prescribed in the Early Mediaeval period, pewter being only allowed in the case of poor communities.

From at any rate the ninth century down to Romanesque times a tube (*calamus, canna, fistula*, &c.: Fr. *chalumeau*) was often used with the chalice; thus in the inventory of gifts to Exeter Cathedral by Bishop Leofric about A. D. 1046, mention is made of 'a silfrene pipe' with chalices. The calamus survived until comparatively modern times at certain places—e.g. the Monasteries of Cluny and St. Denis—and it is still used by the Pope.

In the fifteenth century the chalice was sometimes accompanied by a small spoon for mixing a little water with the wine.

CHEFS.

The Chef was a reliquary in the form of a head, in which a saint's head or any part of it was kept for veneration: it was usually richly decorated and enriched with gems. The example in Wall-Case 27 for the head of St. Eustace was formerly in Basle Cathedral.

CHESS. *See* p. 135.

CHRISMATORIES.

The Chrismatory is a receptacle for the holy oils used in the Roman Church. It is usually of metal and in the form of three short cylindrical boxes conjoined, but sometimes, as in several English Chrismatories, three small cylindrical pots are placed in a row in a metal stand or case. The example in Wall-Case 28 was found at Cologne, and has on the interior of the lid, as is usual, letters indicating the several oils.

CIBORIA.

The word is usually derived from Gr. *κιβώριον*, connected with *κιβωτός*, a wooden box or chest. In the Early Christian Church the ciborium was a canopy above the altar, standing upon four columns between which curtains were sometimes drawn, and from which a vessel containing the reserved sacrament was often suspended. In the Greek Church a miniature canopy is still used, the columns of which rest not on the ground, but on the top of the altar. From about the tenth century the word was confined to the vessel in which the reserved sacrament was kept. In Romanesque times this was often an enamelled metal dove, which was suspended above the altar; from the thirteenth century it took a form resembling that of a chalice with a lid, both bowl and lid being approximately hemispherical and the latter surmounted by a cross: this form has continued until the present day. Ciboria of this kind, which became exceedingly numerous in the fourteenth century, were kept for safety at first in niches by the altar, then in tabernacles of elaborate construction.

CLOCKS AND WATCHES.

Wall-Cases 21–4, Table-Cases G and K.

The earliest clocks worked by means of weights, and at whatever date they may have been invented, were certainly in existence in the fourteenth century. But these were large time-pieces set up in churches and monasteries, and need not be discussed in connexion with the chamber-clocks and watches which alone form part of the Museum collection. One or two large mediaeval

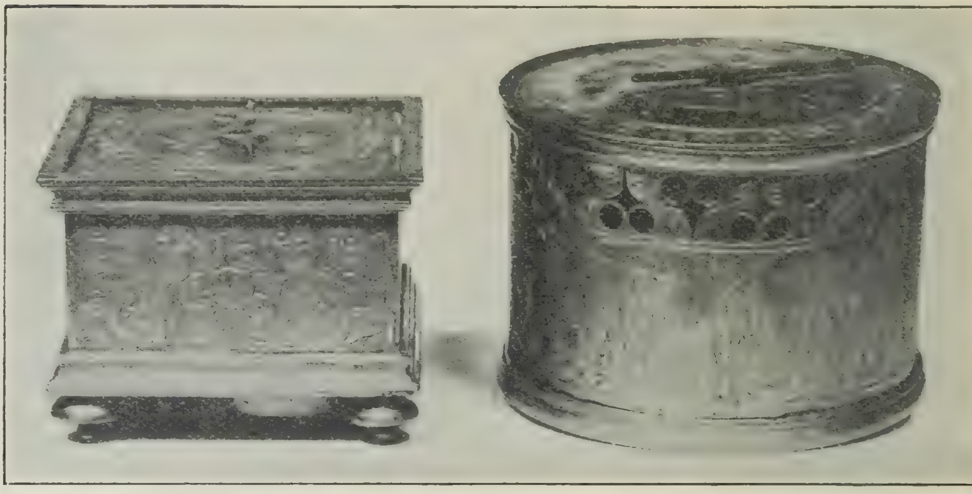


Fig. 77.—Horizontal striking-clocks, German, sixteenth century.

clocks, one of the fourteenth century from Dover Castle, may be seen in the collection of scientific instruments at South Kensington.

In order to make a time-piece portable, it was necessary to provide some less cumbrous motor than heavy driving-weights suspended on cords or chains. Such a substitute was the main-spring, or a steel ribbon coiled round a central spindle or arbor, first employed by Peter Henlein or Hele, a Nuremberg clock-maker at the beginning of the sixteenth century. The new invention made small clocks possible; and from this period down to about 1570 table-clocks were produced for the use of wealthy persons, with cylindrical or rectangular cases of gilt bronze or brass, ornamented with incised designs. They were chiefly horizontal, the face being upon the top (fig. 77); and the numbers upon the dial, which had no glass until the sixteenth century, were usually seen through perforations in the cover. Some of these clocks

were soon made small enough to be carried on the person, and are known as clock-watches (examples in Table-Case G). The cases of these early instruments were often made in open-work in order that the striking of the bell with which they were commonly provided might be more readily heard.

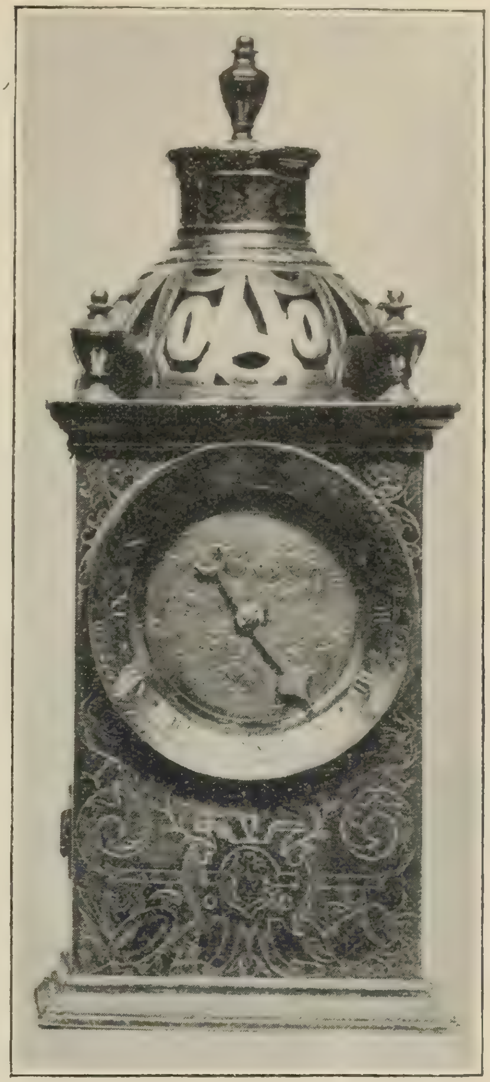

FIG. 78.—Clock by Bartholomew Newsum, about 1590

Table-clocks and watches of the sixteenth century are comparatively rare, and most of them are of German origin, though the manufacture had soon extended into France and the Low Countries. With the approach of the seventeenth century, the simple and low models were superseded by cases of taller form, some of elaborate architectonic designs with ornamental plinths and columns, and frequently embellished with statuettes. Even at this early date fanciful forms appear, such as the 'nef' or ship-clock by Hanns Schlott, made in 1580 (Wall-Case 23, plate VII): the form in this case was probably suggested by the nefs of contemporary plate (see p. 239). Some of these clocks have several independent dials, marking not only the hours of the day, but the day of the month, the phases of the moon, the signs of the zodiac, and even the courses of the planets. Most of them have only an hour-hand, but the minute-hand appears in rare examples in the last quarter of the century. It may be stated here that the minute-hand was only gradually recognized: in England it was not common upon clocks before 1670, and was often omitted by provincial clockmakers quite late in the eighteenth century. In the seventeenth century the elaborate forms were continued, and the clocks were usually raised upon feet. As the century advanced, the German clockmakers of Augsburg and Nuremberg

associated with the dials of their time-pieces human and animal figures dominating the whole design, and often moving automatically at the striking of the hour; in the manufacture of these clocks we observe the same fanciful turn of mind which produced the contemporary cups exhibited in the Waddesdon Bequest. The clocks shown in fig. 9, in which negro figures point the hours upon a revolving globe, illustrate the style of work in favour at this time. In France, the cases of clocks from the latter part of the seventeenth century were decorated in the style of Louis XIV; and Caffieri, Boulle, and Marot frequently designed and ornamented them. During the eighteenth and nineteenth centuries, French clocks were made in the changing styles which characterize the furniture of the periods of Louis XV, the Regency, Louis XVI, and the Empire (examples in the Wallace Collection, and the Jones Collection at South Kensington). In England, where chamber-clocks began to be generally made about 1600, the first common form was a wall-clock with driving-weights and a balance, the pendulum not coming in until 1658. Many of the smaller English domestic clocks from the time of Elizabeth to about the eighteenth century were of brass, with the bell at the top, and ornamented above the dial with openwork brass frets, in which shields, vases, and dolphins were prominent motives: the dolphins, an especially favourite design, came into use about 1640. They are known as lantern-clocks (examples in Wall-Cases 21 and 22). Finely decorated bracket-clocks, with wooden cases enriched with gilt metal mounts, were also made from the second half of the seventeenth century. The clocks with long cases, familiarly known as Grandfather's clocks, were probably introduced between 1660 and 1670, and the earliest examples were comparatively small. Arched tops appear to have been added to the dials early in the eighteenth century. As in France, the style of the best furniture-designers was adopted for clock-cases, and Chippendale and Sheraton have left such examples of their work.

The luxurious taste and love of curious devices which characterized the second half of the sixteenth century, demanded more original designs than the simple circular form of the earliest *watches*. The watchmakers of Southern Germany and of France produced small watches in a great variety of forms, their cases being often sumptuously decorated with chasing and enamels, or formed of rock-crystal plates. The collection contains several examples in the quaint forms of this time, such as books, flowers, skulls, crosses, and even animals. These watches were no doubt at first imported into England, where there seems to be no evidence of manufacture before the end of the sixteenth century. About this time watches were sometimes mounted upon pillars or pedestals: a fine example by Nicolaus Rugendas of Augsburg, probably dating from about 1610, is exhibited in

Table-Case G. From the close of the sixteenth to the close of the seventeenth century, octagonal watches, the cases frequently in great part of crystal, were in favour (fig. 79). Oval watches, probably first made at Nuremberg about 1600, were also general in the first part of the seventeenth century. Circular watches were in use at the same time.

Down to about 1630, watches, when worn on the person, were suspended from the neck or waist; but at this date they seem to have been carried in the fob or pocket; one of the small English watches in the collection, which tradition associates with Oliver Cromwell, has attached to it one of the earliest fob-chains in existence. It was not until about 1610 that watches were furnished

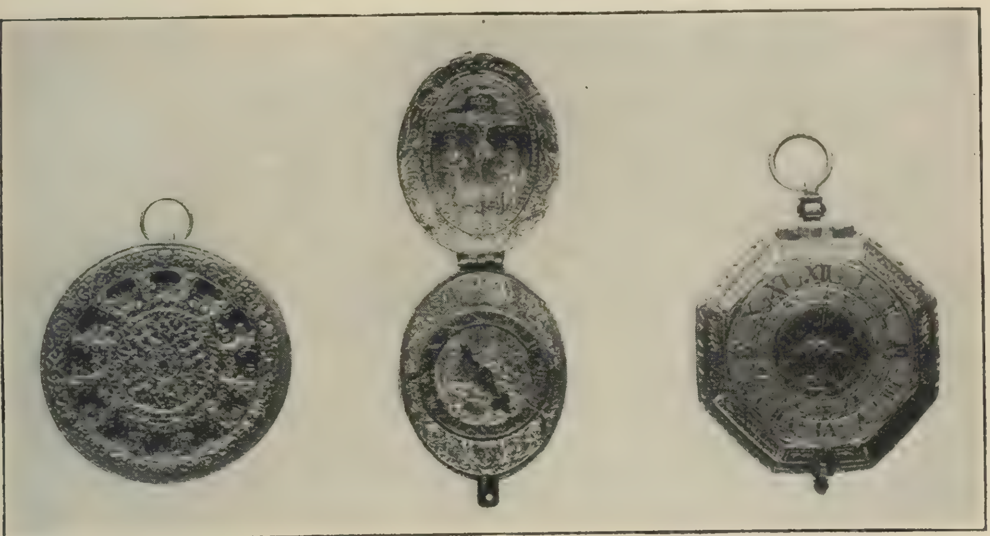


Fig. 79.—Watches of the sixteenth and seventeenth centuries. To left: German, Augsburg, about 1530; to right, German, about 1550; in the middle, English watch by John Wright, about 1620.

with protecting glasses: these were at first thick and flat; afterwards, highly convex and cut from spheres. Later, the bull's-eye glass with flat centre was introduced from Germany, to be succeeded by the slightly convex 'lunette' from France, and the thick crystal glass in use at the present day. Outer cases, rendered necessary by the elaborate ornamentation of watch-backs with enamels and gems, became general from about 1640, and continued in use until the beginning of the nineteenth century. These were of metal engraved, chased, or embossed; of leather piqué with gold or silver pins; shagreen; tortoiseshell; horn and other materials.

In very early watches the numbers were engraved upon a separate metal band placed upon the dial; but from about 1600

a single plate was used, the centre commonly engraved with landscapes and other designs. In England after the middle of the seventeenth century, gold dials with the figures in relief were frequent, except in the case of enamelled faces on which the figures were painted. With the appearance of the minute-hand in the last quarter of the seventeenth century, the numbers of the minutes were placed in a circle outside that of the hours, but this arrangement was discarded in England towards the middle of the eighteenth century, though retained rather longer in France and Switzerland. Plain white enamel dials seem to have been introduced in these two countries about 1690, and appeared in England about a dozen years later. But many French watches of the late seventeenth and early eighteenth centuries have brass dials with added enamel discs for the hours. Second-hands are not usually found on watch-dials until after 1760.

Large travelling-watches, often with a repeating mechanism, and generally with pierced cases to allow passage to the sound of the bell, were made from the latter part of the seventeenth century until railways made an end of long coach journeys: they chiefly come from France and Germany.

The most famous of the early British makers were Bartholomew Newsum, probably working in London before 1568, watchmaker to Queen Elizabeth (clock in Wall-Case 22, fig. 78), and David Ramsay of Scotland (1600–1650), maker to James I and Charles I, who is introduced as a character in 'The Fortunes of Nigel'. Other distinguished names are those of Edward East, successor of Ramsay as watchmaker to Charles I, Thomas Tompion (1638–1713), clock and watchmaker to Charles II (clock in Wall-Case 21), to whom several important inventions are due, George Graham (1673–1751), long associated with Tompion, and buried, like him, in Westminster Abbey, Daniel Quare (1648–1724), inventor of the repeating-watch, Thomas Mudge (1715–1794), inventor of the lever escapement, John Arnold (1736–1799), and Thomas Earnshaw (1749–1829), both of whom effected improvements in the chronometer. British watchmakers have throughout held a most honourable place in the history of horological invention.

The *motive power* of the ordinary clock is furnished by a weight, which, falling gradually, revolves a spindle round which is coiled the cord suspending it. This spindle is connected by cogs or teeth with toothed wheels, which control the hands revolving round the dial. In an ordinary dial the hour-hand makes only one revolution while the minute-hand makes twelve, and the relation of the toothing of the wheels connecting the two hands must therefore be in the same ratio: e.g. as 8 is to 96.

The *regulation* of this mechanism is furnished by a balance or a pendulum. If the weight had uncontrolled power to follow

the laws of gravity, it would fall to the full length of the suspending cord just as quickly as the resistance of the intervening wheels would allow. Hence some regulating mechanism is needed. Between the balance (or the pendulum) and the train of wheels is interposed an 'escapement'. The earliest form of this device acts in the following way. The balance is a weighted bar (or a wheel) which revolves backwards and forwards, imparting similar motions to a spindle passing through its centre; from this spindle project two flanges (pallets) which engage teeth on the face of a wheel or short cylinder. Of these two flanges one imparts an impulse to the balance, while the other checks its too rapid progress, thus regulating the fall of the weight and the resulting motion of the train of wheels. By a careful adjustment of the relation of the wheels and by an infinite variety of devices in the escapement, the accurate registering of the hour by the hands on the dial has in course of time been attained. The pendulum, invented in the seventeenth century, was found capable of greater accuracy than the balance, from the fact that the regularity of the beat of a pendulum is roughly in a constant ratio to its length. Near the upper (or fixed) end of the pendulum is applied an arrangement similar to the two pallets acting on the escapement wheel, as described for the balance. In watches (and in table-clocks) the motive power is produced by a spring which, being closely coiled in a box or drum, drives the train of wheels by the force exerted in the natural process of uncoiling. The drum containing the spring is connected with a pyramidal 'fusee' by a chain, and the winding of this chain coils up the spring to its highest tension. The purpose of the fusee is to equalize the driving power of the spring, which naturally exerts more force when freshly coiled than when it is nearly relaxed; the pyramidal form of the fusee is carefully adjusted so as to compensate the greater or less strength of the spring. The driving power of the spring, thus controlled, passes through the wheels to the escapement, which in its turn controls the pace of the whole

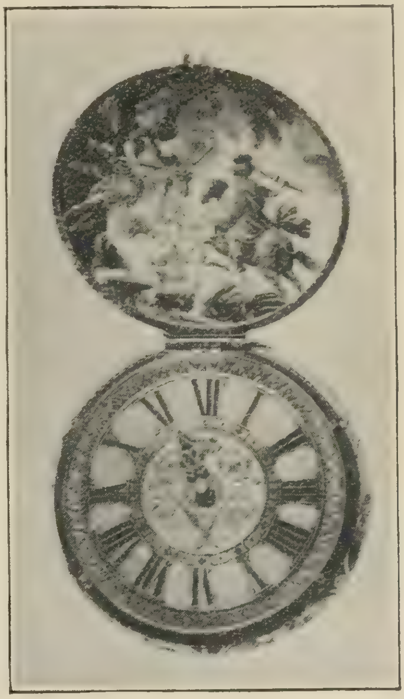


Fig. 80.—Watch with enamelled case, by B. Foucher of Blois, 1630–1640.

movement, in the same way as is stated above in describing a clock escapement.

CLOG ALMANACS.

These almanacs were practically confined to the county of Staffordshire, and may be regarded as descendants of the Scandinavian runic calendars, though they were never inscribed with runes (see Runic Calendars, p. 246). In the English calendars the row of runes for the dominical letter placed to every day of the year is omitted, notches represent the days, and the golden numbers are inserted in Roman numerals. They consist as a rule of wooden staves of square section, along the edges of which the notches are engraved, Sundays being marked by a deeper notch than other days, and festivals indicated by the attribute of the saint to whom the day was dedicated, as in the case of their Scandinavian prototypes. The year and week are always made to begin with a Sunday. The transition from the actual runic calendar to the clog almanac is not precisely defined, but the earliest clogs go back to the last quarter of the sixteenth century. They are now obsolete.

COCO-NUT CUPS. *See* p. 99.

COMBS. *See* pp. 27 and 152.

COMPASS, MARINER'S.

The compass, invented by the Chinese and by them transmitted to the Arabs, was introduced into Western Europe at the time of the Crusades. It was a frequent adjunct to dials between the sixteenth and eighteenth centuries (Dials in Table-Case **K**).

COMMUNION CUPS. *See* p. 82.

COSTUME.

The subject of mediaeval dress does not directly come within the scope of this Guide, for there is no collection of costumes in the Mediaeval Room. But it is desirable to draw attention to



Plate VII. Clock made for the Emperor Rudolph II about 1580.

[See p. 85.

a few important stages of development in dress, as many of the objects in the cases have upon them figures wearing contemporary costume. Two points may be noted by way of preface: the first, that apostles and sacred persons are clothed not in the dress of the artists' times but in that of the early Christian age, or in the nearest approach to it of which the artists were capable: the second, that the dress of members of the lower classes remains very similar from beginning to end of the Middle Ages. The costume of the poor man always consisted of a girded tunic reaching nearly to the knees, a tight covering for the legs, and some kind of cloak or mantle for cold weather: in the same way poor women wore a simple dress of such a kind as to leave the limbs as far as possible unencumbered when working. There were naturally slight variations from century to century, but no fundamental change. It was only among the upper classes that fashion caused comprehensive alterations in garments and in the manner in which they were worn. The following remarks are therefore chiefly concerned with the costume of the wealthier classes.

In the Carlovingian period, with which the Middle Ages may be taken to begin, costume was still obviously based upon late-Roman models. The men wore two tunics, of which the inner had long close sleeves and was confined at the waist by a belt; to protect the lower limbs they had very short breeches and high stockings, sometimes with crossed garters, or else long breeches fitting very close; a mantle resembling the chlamys was fastened by a brooch over the right shoulder. The ivory carvings in Wall-Cases 35 and 36, and the Crystal of Lothair in Table Case F, afford illustrations of these fashions.

At the beginning of the twelfth century a great change took place, possibly in part due to the oriental influence which came in during and after the Crusades. Both the tunics and the mantles of noble persons now often reached almost to the ankles, as may be seen from the statues on the Cathedral of Chartres (about A. D. 1140); and in contemporary female costume we also note very long garments of fine material falling into numerous folds. The dresses of ladies were high at the throat, and their mantles fastened not upon the shoulder, like those of the men, but across the breast, usually by means of a cord. At the end of the twelfth century there began a movement in the contrary direction, and in the thirteenth century garments were cut in such a manner that, though still long, they did not impede the free movement of body and limbs. During this century and the beginning of that which followed, male and female garments are very much alike, and at first sight it is sometimes difficult to distinguish men from women, especially as they wore their hair long and were generally clean shaven. The head-dresses of ladies remained comparatively simple,

the usual covering being some variety of the *chaperon*, a low cylindrical cap, beneath which a veil was often worn to fall upon the shoulders: one form of veil, the *barbette*, was bound round the head in such a way as to cover both chin and cheeks. For the dress of this period see rectangular enamelled casket in Wall-Case 27 (fig. 81), and the ivory caskets, mirror-cases, and writing-tablets in Table-Case F (figs. 82, 120, and 121).

About A. D. 1340 marked changes are apparent. Men adopted short tunics not reaching to the knees, with numerous buttons down the front, and long tightly-fitting nether garments, either including the feet or stopping at the ankles: mantles were only worn on special occasions, a kind of pelisse being worn for ordinary use; the toes of shoes became long and pointed. At the same time a tendency to décolletage is observable in female dress; skirts had trains, and the hair was confined in nets or other coverings. Some of the later ivory mirror-cases and tablets illustrate the progress of these changes, which heralded the fantastic fashions of the fifteenth century. At that period costume perhaps reached a higher pitch of exaggeration in form and colour than at any time in the world's history. Men now wore tight parti-coloured breeches and shoes with even longer points than before, so long that sometimes they had to be actually tied to the leg to keep them from getting in the way. Their close jackets or pourpoints were short and tightly girded, their hair worn long and falling upon the shoulders. All kinds of cumbrous head-dresses were worn by both sexes, those of ladies reaching enormous proportions, some taking the form of large turbans, single or with two horns, and tall sugar-loaves, from which veils depended down the back. Some of these fashions may be seen on the painted front of an Italian *cassone* or marriage coffer of the early fifteenth century in Wall-Cases 33 and 34.

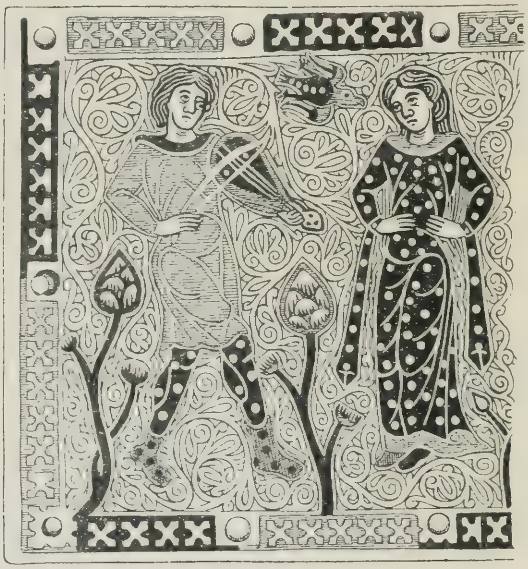


Fig. 81.—Detail from enamelled casket, Limoges, end of twelfth century.

The latter part of the century witnessed a reaction towards a more sensible style of dress, partly due to the influence of the

more restrained fashions now prevailing in Italy, and in the following century began the changes from which modern costume has developed. By degrees, through such transitional forms as doublets and trunk hose, the coat, breeches, and stockings of later times came into being; while the bodice and skirt succeeded the earlier garments of the feminine wardrobe, and hats were generally worn.

The wearing of black garments in sign of mourning, though



Fig. 82.—Ivory mirror-case, French, early fourteenth century.

known to the Romans and apparently to the Spaniards in the twelfth century, does not seem to have been adopted in France and England until the fourteenth. In 1365 the English Court went into mourning for King John of France, and in the latter country royal mourning is recorded about fifty years earlier: in the fifteenth century mourning became more general.

Gloves were worn throughout the Middle Ages. Special thick gloves were worn in hawking; and in the Church the glove was the attribute of the bishop or mitred abbot. Examples of mediaeval shoes are shown on the wall next Case 49.

COUNTERS.

Counters came into use with the spread of card games, but the most interesting examples were made in the latter part of the sixteenth and the first half of the seventeenth centuries. Sets of silver counters (originally thirty-six) in cylindrical silver cases, and bearing portraits of sovereigns and their coats of arms were first made in the seventeenth century in the reign of Charles I (Table-Case **L**). It is stated by Horace Walpole that James I gave Nicholas Hilliard a licence to engrave counters with royal portraits for twelve years, and that he deputed the work to the Passes and other artists. But it is doubtful whether these counters were not really struck or stamped, and not engraved at all ; it has even been suggested that the larger oval silver portraits of the seventeenth century were produced in the same way, though in this case the work may have been subsequently improved and modified by the engraver.

On the tops and bottoms of the cylindrical boxes containing the counters are often embossed portraits of the reigning sovereigns from Charles I to George I, but other designs also occur.

Counters used solely for commercial transactions, being of a medallic character, are preserved in the Department of Coins and Medals.

CRAMP RINGS. *See* p. 174.

CRESTS. *See* p. 66.

CROSS-BOWS. *See* p. 65.

CROZIERS.

The word *crocia*, from which crozier is derived, was not adopted in vulgar Latin until the eleventh century ; but there are representations of the staff with the volute from the ninth century onwards, and for a considerable time it seems to have been used indifferently with the tau-cross (which see). The volute commonly terminates in the head of a serpent or dragon, which is symbolical. In earlier centuries it frequently contains a lamb ; in later, especially in the fourteenth century, scriptural subjects, the Crucifixion and the Virgin and Child being especially frequent.

Croziers were of various materials, the heads being often of silver, enamelled bronze (Wall-Cases 28 and 29), ivory (Table-Case **F**), or other valuable material. The staves themselves were usually of wood sometimes concealed by cylinders of engraved bone

(Table-Case F). Croziers buried with a deceased bishop were often of wood, as in the case of the example found in the grave of Bishop Lyndewode in Wall-Case 21. A fine crozier by Frère Hugo of Oignies (Wall-Case 27) is represented on plate XI.

CRUETS (Amulae).

In the Roman Church from very early times two small vessels resembling ewers have been used to contain respectively the wine and the water for the chalice. They are usually of silver, but were occasionally made of crystal or agate, especially in the eleventh and twelfth centuries: in the Middle Ages they were sometimes made of wood, especially box (Fr. *buis*), from which the French term *burette* is derived. Cruets commonly had engraved upon their tops the initials A and V for *Aqua* and *Vinum* respectively.

In the English Church after the Reformation cruets were superseded by *flagons*, the earliest examples dating from the time of Elizabeth. One flagon would now have been sufficient, but they were commonly made in pairs. Down to about A. D. 1615 they still preserved some resemblance to cruets, and had high feet, narrow necks, and spherical bodies; from that time dates the introduction of tankard-flagons, of which the example in Wall-Case 17, from Seaford, Sussex, dated 1642, is a good illustration. This, like many other early flagons, is of pewter, for the flagon was not so invariably made of precious metal as were the chalice and the paten.

CRYSTAL.

Rock crystal (a colourless hyaline quartz) was alone described as crystal till the sixteenth century, at which time the clear glass of Venice was also given this name. It was engraved in intaglio as a gem by Carlovingian lapidaries (see p. 138), and in the twelfth and thirteenth centuries a number of small reliquaries, flasks and pierced cylinders or spheres for covering the staves of croziers or stems of vessels, were made. The more important of these are carved in relief with designs often of oriental character; the fashion of carving crystal was perhaps adopted from the Mahommedans, who were in the habit of making ewers and flasks of this stone. Crystal continued to be used for beads and other small objects down to the Renaissance, when cups were frequently made of it (examples in the Waddesdon Bequest, and in the Gold Ornament Room, Case W). Intaglio designs were also cut on plaques of crystal: a set of such plaques by Valerio Belli is in the Vatican; and from these metal plaquettes are thought to have been made. Crystal, like other stones, was

considered to possess curative powers, and the crystal spheres worn by the Anglo-Saxons had an amuletic significance (Anglo-Saxon Room, Table-Case **G**). Spheres of crystal were used for what is known as crystal-gazing, and the sphere in Table-Case **A** is said to have been used by Dr. Dee.

CUIR-BOUILLI.

'Cuir boli' is mentioned in manuscripts as early as the twelfth century; but the surviving examples of finely incised, embossed and stamped leather, chiefly date from the fourteenth to the sixteenth century. It was used to make sword- and knife-sheaths, shoes, bottles, caskets, boxes and cases of all kinds for books, ivories, knives and instruments, and was known, though inaccurately, as *cuir-bouilli* (boiled leather), for though when boiled either in water alone or in oil or wax leather certainly becomes soft, it dries as hard as horn and as brittle as glass. On the other hand immersion in oil or melted wax, while only moderately hot but well below boiling-point, is calculated to leave the leather supple, and by drying gradually, to give the designs the requisite hardness and durability without brittleness. When, therefore, the early writers speak of *boiling*, they should be understood as meaning rather a steeping process. As a medium, the mediaeval craftsmen seem to have used melted wax dissolved in certain essences, rather than linseed oil as Viollet-le-Duc supposed. But modern imitations made by means of stamps are produced from leather which has undergone no such elaborate preliminary treatment.

The early writers on the industrial arts, Heraclius and Theophilus, are silent on the subject of cuir-bouilli; and Étienne Boileau in his *Livre des Métiers* (about A.D. 1258) only says that the art was practised by the *gaîniers*, or makers of sheaths and cases, under stringent regulations ensuring work of good quality. In A.D. 1560 the statutes of the Master Gaîniers of Paris ordain that all leather bottles must be of ox- or cow-hide; these seem to have always been the hides preferred, though the skins of the calf, horse, and ass were also employed.

The method of manufacture appears to have been to form the object in plain leather, and over this to apply a second leather covering, upon the surface of which the ornamentation was afterwards executed. The necessity for two thicknesses is particularly insisted upon in the *Livre des Métiers*, and they are found in all the good early examples.

The most important part of the decoration in the earlier work was incised and embossed by the free hand, but small stamps or punches were used for the grounds. Where the reliefs are in

large masses or very high, they may sometimes have been roughly modelled upon the inner leather in some kind of filling glued to the surface. Over this the upper leather in a soft state would then be applied, and the grounds punched down: where the relief is low, no such filling would be necessary. Another method of accentuating relief was to insert a spatula and work the design up from beneath, though this involved making an incision along one

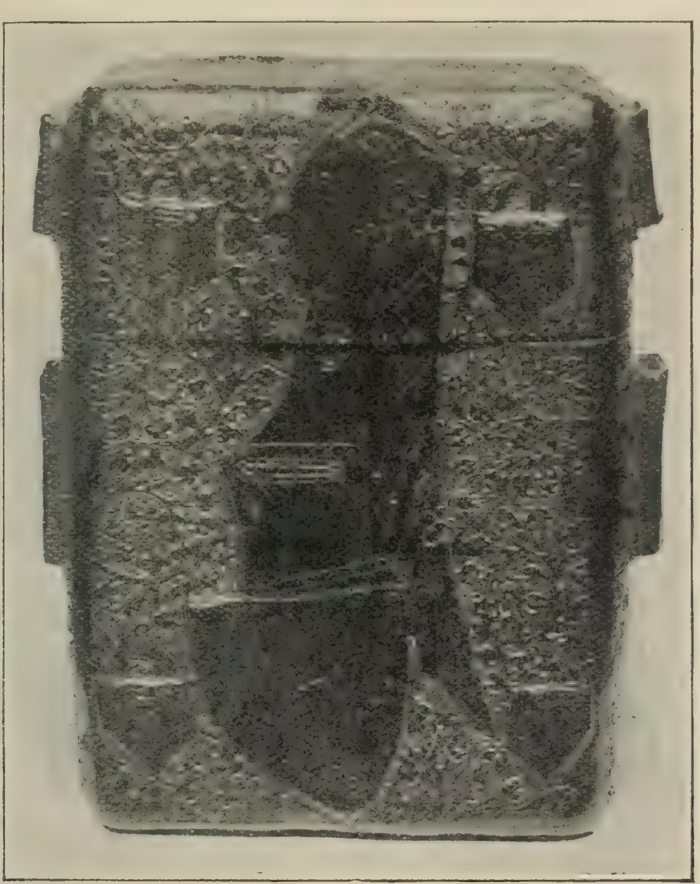


Fig. 83.—Cuir-bouilli case for a book, Italian, fifteenth century.

side. This is a process which was in special favour with the Italian craftsmen of the fifteenth and sixteenth centuries, and sufficed for foliage or conventional designs. But for the human figure, which was reproduced with increasing frequency in the sixteenth century, repeated pressure must have been employed in order to secure precision of modelling; and this must have been applied from the back before the leather was finally fixed in place. The tools used in making the incised designs were probably heated, as modern experiments have shown that when the metal

is hot enough slightly to burn the edges of the cuts, the incised lines, when dry and hard, form a somewhat wider channel and produce a bolder effect. The designs upon cuir-bouilli were constantly coloured and gilded, gilding being specially applied to the



Fig. 84.—Cuir-bouilli case with surgeons' instruments, Italian, sixteenth century.

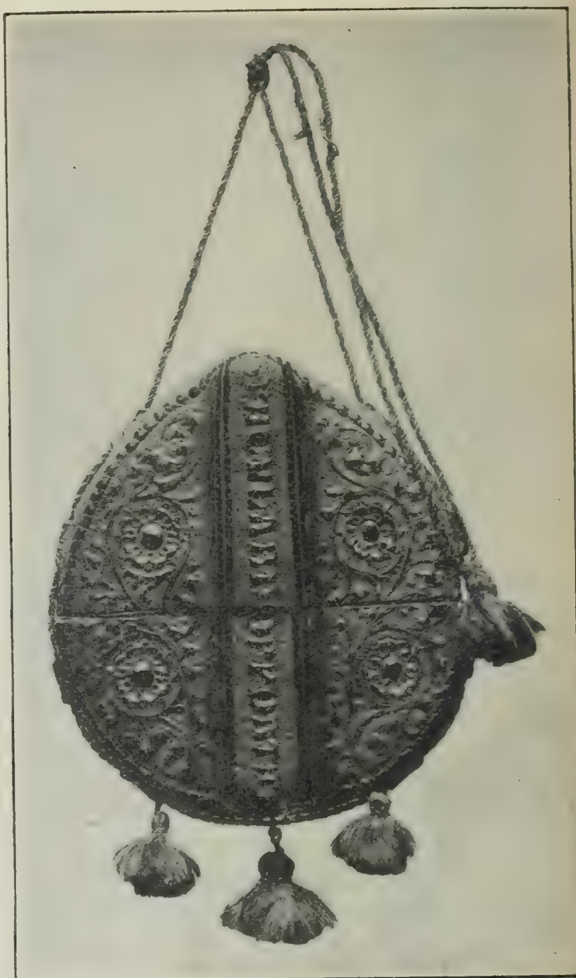


Fig. 85.—Cuir-bouilli case, probably for an astrolabe, Italian, about 1520.

grounds. In the sixteenth century, the gainiers began to use metal matrices in which the whole design was cut in intaglio; they now also began to follow the methods of the bookbinders, and by the seventeenth century, working in cuir bouilli had ceased to be an independent art.

This kind of work was popular in all countries, especially in Italy and France, where very beautiful examples were produced,

among the finest being the splendid sword-sheath made for Caesar Borgia in the Victoria and Albert Museum. Although the best work is found upon objects of use rather than upon articles of apparel, shoes were often decorated by this process. Examples of English shoes may be seen upon the frame upon the wall between Cases 49 and 50. Cuir-bouilli was in extensive use in England in the Middle Ages: the case for sacramental plate from Little Welnetham Church, Suffolk (Wall-Case 49 and fig. 28), is probably an example of English work, like the case of similar form of the fourteenth century in the Church of St. Agnes at Cawston in Norfolk. The effigy of Henry VIII exposed to public view during his obsequies was of this material, and it will be remembered that Chaucer describes Sir Thopas as wearing jambeaux of 'coorbuly', for it was largely employed to strengthen armour in the time of transition between the periods of mail and plate. It was also used for crests and for the bardings of horses.

CUP-DIALS. *See* p. 104.

CUPS AND JUGS.

The cups of great and wealthy persons were of high intrinsic and artistic value. They were almost always furnished with covers; and from the fact that they were commonly supported on stems are usually called standing-cups: the term *hanap* is also applied to them (der. Anglo-Saxon *hnæp*, Old High German *hnapf*, a cup or goblet). Cups are frequently mentioned in inventories from the thirteenth century onwards, and were often known by proper names. Of the more popular forms the following may be mentioned:

Coco-nut and Ostrich-egg cups, in which the nut or egg-shell forms the bowl. These were in use for a very long period, as they are mentioned in the thirteenth and fourteenth centuries, though surviving examples are usually of the sixteenth and seventeenth. The ostrich egg was known as the *gripe's* or *gripey's* (gryphon's) egg. Examples of both types of cup are in the Franks Bequest in the Gold Ornament Room (Case **S**), and in the Waddesdon Bequest Room (Case **G**).

Horns mounted in silver were also of great antiquity, and were sometimes supposed to have the virtue of revealing the presence of any poison introduced into the wine (see '*Poison, tests against*'). Drinking-horns of this kind were of the utmost importance when they represented the tenure of estates by 'cornage', as the Pusey horn still represents the village of Pusey in Berkshire. A fifteenth-century drinking-horn (fig. 86) is in the Franks Bequest (Gold

Ornament Room, Case S), and a curious later example in ivory is in the Mediaeval Room (Wall-Cases 46–7). A magnificent example of the fourteenth century is preserved at Queen's College, Oxford.

Standing-cups made entirely of the precious metals are no less ancient, but the oldest bearing an English hall-mark is of the year A. D. 1481. The fine cup with translucent enamels at King's Lynn is of the fourteenth century, but not certainly English, and the Foundress's Cup at Christ's College, Cambridge, is shown by an enamelled coat of arms within it to have been made about



FIG. 86.—Scandinavian drinking-horn, fifteenth century. Franks Bequest.

A. D. 1440. It has a hemispherical bowl on a high stem, and a tall conical cover, and is ornamented with diagonal bands of foliate design. Cups in various Oxford and Cambridge colleges dating from the late fifteenth and early sixteenth centuries are of the beaker form; others of the same period in the possession of London city companies have stems and more or less conical covers terminating in elaborate knops or finials. With the Elizabethan period cups became taller and more slender, and were ornamented in the Renaissance style. In the seventeenth century cups sometimes, as in Germany, took the form of birds and animals (examples in Waddesdon Bequest). Wager-cups of the type mentioned as popular in Germany (see p. 239) were also in

use in England. An early seventeenth-century form is the Steeple-cup, the cover of which is surmounted by a small obelisk raised on four brackets. In the first half of the eighteenth century large two-handled cups with covers, standing on low feet, came into use, and were decorated according to the taste of the period. The form which this style assumed at the end of the century is well illustrated by the example in Wall-Case 48.

Tankards. The word tankard, in earlier times used for buckets, seems to have been applied to the covered drinking-vessels with cylindrical body and single handle towards the close of the sixteenth century. In the first half of the seventeenth century tankards are tall, in the latter half, short and broad; the type with curved sides was introduced in the first half of the eighteenth century.

Tazza-shaped silver cups like large champagne-glasses date about A.D. 1570 to the time of the Civil Wars (examples in Franks Bequest).

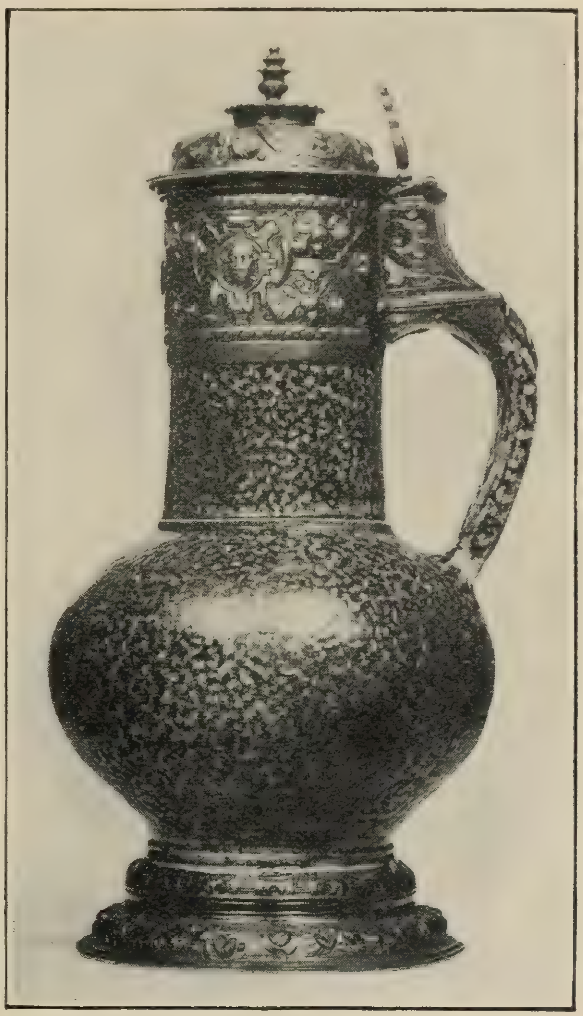


FIG. 87.—German stoneware jug with English silver mounts, sixteenth century.

Simple *Beakers*, though mentioned in early inventories, are not found in silver before the beginning of the seventeenth century.

Tasters, often described as bleeding-cups, are small shallow bowls with a flat handle projecting at right angles from the rim. They were used in the sixteenth century, but most of those now in existence date from the middle of the seventeenth to the beginning of the eighteenth centuries. A fine Swiss example of

the sixteenth century is in the Franks Bequest (Gold Ornament Room, Case S).

Caudle-cups and porringers were much used in the seventeenth and early eighteenth centuries, the former for drinking posset (milk curdled with wine, &c.). Both are two-handled vessels with covers and without feet, but the caudle-cup is smaller at the mouth than the porringer.

Vessels of glass, crystal, stoneware and porcelain in England, as in other countries, were frequently mounted in silver. Here mention can only be made of the jugs of mottled stoneware largely imported from Cologne in the second half of the sixteenth century, to which silver mounts and covers were added in England. Examples are fairly numerous, and those in the Franks Bequest in the Gold Ornament Room will give a fair idea of the style. Mounted jugs of this kind went out of fashion at the commencement of the seventeenth century. It may be conveniently mentioned here that the earliest *casters* are of the beginning of the eighteenth century; and that silver *teapots*, which begin not far from the year 1700, are rare before the reign of George I.

DAMASCENING. *See* pp. 211, 218.

DATES.

When dates are expressed in Arabic numerals their interpretation is simple, the only difficulty being the unfamiliar forms of certain numbers (see fig. 159). Dates in Roman letters sometimes appear more complicated. The value of Roman letters are as follows:

I = 1, X = 10, C = 100, M or CIↃ = 1000,
V = 5, L = 50, D or IↃ = 500.

Formerly multiples were indicated by simply repeating the figure; but when repetition would require four figures modern usage replaces IIII by IV (except on dials of clocks and watches), VIIII by IX, XXXX by XL, and LXXXX by XC. The small 'o' placed over Roman numerals signifies that the number is to be read as a numeral adjective in the ablative case, agreeing with 'anno' ('in the year') understood. Thus $\overset{o}{M}\ CC\overset{o}{C}\ \overset{o}{L}\ \overset{o}{V}$ = (anno Domini) millesimo trecentesimo quinquagesimo quinto = A.D. 1355. For the first seven centuries of our era, dates were reckoned by the tenure of office of consuls, by indictions (periods of fifteen years), or by the years of the kings' reigns. The custom of dating by the year of Our Lord began in the ninth century; but in England documents were generally dated by the year of the reigning king until the latter half of the fifteenth century.

In early times the year began on Christmas Day; but in England from the twelfth century until the reign of George II (1752) it began on March 25. In France it began on March 25 or on Easter Eve down to 1563 when January 1 was adopted.

DIALS.

Table-Cases K and G.

Dials are instruments for telling the hours by means of a shadow cast by the sun: they have been known for considerably more than two thousand years, and though now rendered obsolete by the multiplication of cheap clocks and watches are still manufactured as ornaments for gardens and buildings.

A dial is made by fixing to a flat surface a rod (style or gnomon), forming with the horizon an angle equal to the latitude of the place for which it is to be used, and then drawing a line upon the surface behind it in such a way that the shadow of the style falls upon it at noon, which means that the plane through the style and the sun coincide with the meridian. After this, other lines are traced at the intervals where the shadow would fall at each succeeding hour. Fixed dials are inaccurate if used at any other latitude than that for which they are constructed.

The dials in the Museum collection are of the portable kind which was of much later invention than fixed dials, though examples from the period of the early Roman Empire show that both the type which could only be used in one latitude, and the more advanced variety which could be used anywhere, were known to the Romans. The first type is represented by a bronze dial in the Naples Museum, found at Herculaneum in 1754, with hour-lines engraved on a flat surface; the second, by a circular bronze dial in the possession of Lewis Evans, Esq., F.S.A. All the various forms of portable dials are really descended from these earlier types, but the variations are so numerous that only a few can be mentioned below. The gnomons also take many shapes, being often formed by strings, which are taut only when the instrument is open; such are those of the flat ivory dials of the seventeenth century which close like tablets or books. The earlier portable dials relied for the determination of time solely upon the sun's altitude above the horizon; they thus had this great defect, that when they were used about midday it was first necessary to determine whether noon was already past or not. To obviate this difficulty, after the thirteenth century a compass was set in the face of the dial, and instruments of this kind, in brass boxes with folding gnomons, were commonly made in England down to the eighteenth century: some were so small as to be mounted in

finger-rings. The following are interesting forms of dials represented in the collection.

The *chalice, goblet,* or *cup-dial* (*Horologium in cratere*) is in the form of a cup, the hour-lines being engraved on the interior. The fine example in Table-Case **K** was made in Bavaria in 1550.

The *pillar dial* in its commoner form was a cylinder with a movable gnomon at the top. This is set at the right position for the day of the month as shown in a scale round the base. The dial is then suspended vertically with the pointer towards the sun ; the shadow then falls upon the curved hour-lines engraved

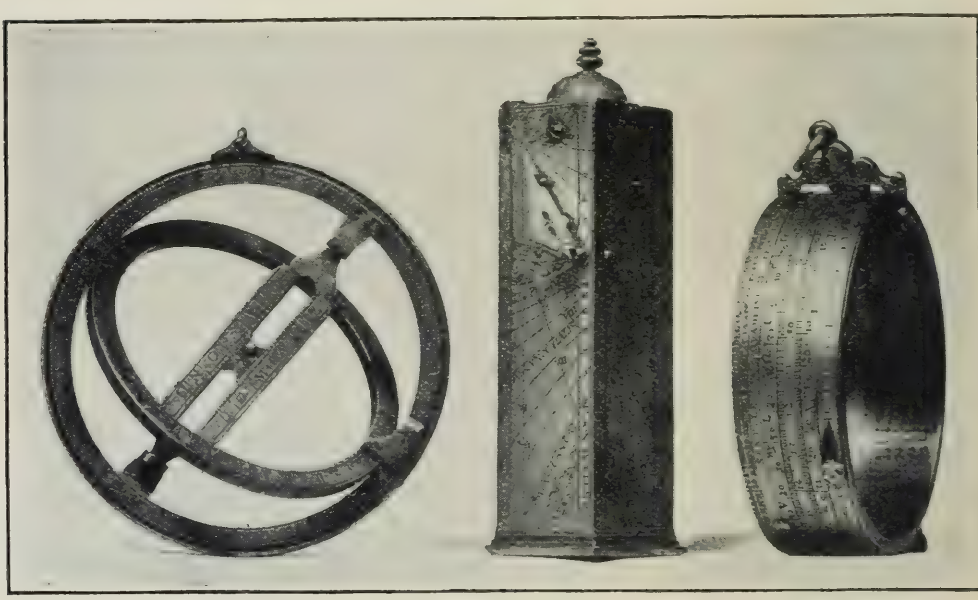


FIG. 88.—Dials of the sixteenth and seventeenth centuries. On the left, armillary dial by E. Culpeper of London, late seventeenth century : in the middle, pillar-dial, Munich, 1567 ; on the right, ring-dial by Humfrey Cole, 1575.

round the cylinder. These dials, sometimes called shepherds' dials, were in common use from the thirteenth to the seventeenth centuries, and the type is still found in the Pyrenees.

The *quadrant* was commonly used as a dial. The altitude of the sun was taken through the pierced sights, and the time shown on the curved hour-lines by means of a plumb-line hanging from the angle.

The *ring-dial* (fig. 88) in its most ordinary form is a flat ring of brass, on the inner side of which are engraved the hours of the day, while on the outer side are the names of the months. Round the middle of the outer side runs a narrow sliding ring covering a slit, and in this ring is a small hole. When the dial is used,

the sliding ring is pushed round until the hole is opposite the day of the month ; the instrument is then held by its suspension-ring and turned to the sun, so that the rays of light passing through the hole form a bright spot which indicates the time. Ring-dials were very popular in England and were made at Sheffield down to about the year 1800.

The *armillary dial*, or universal ring-dial (fig. 88), consists of two flat rings, the inner of which is turned at right angles to the outer

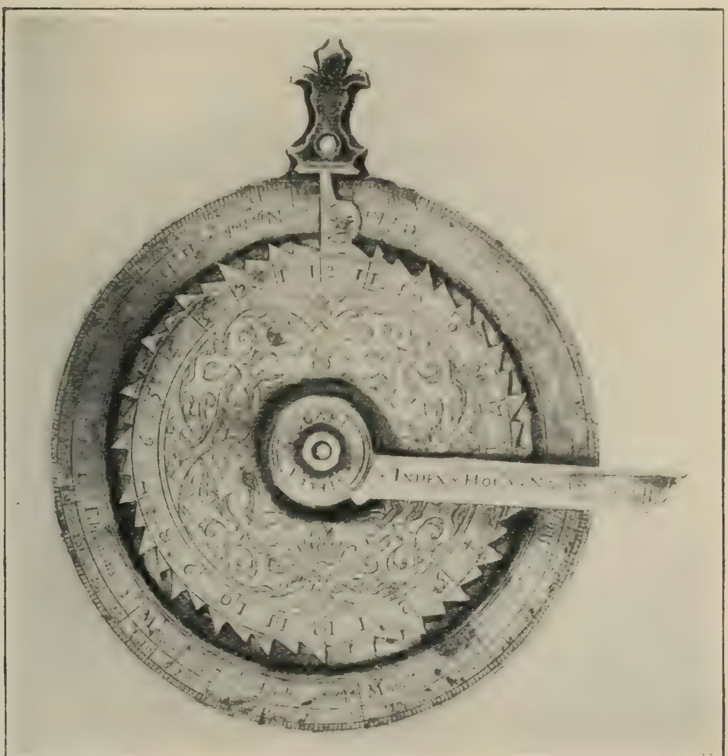


FIG. 89.—Nocturnal, by Humfrey Cole, about 1590.

when the instrument is in use: a bridge with a cursor forms a diameter of the larger ring, and in the middle of this there is a small hole. The outer ring, which represents the meridian of the place where the user of the instrument is, has engraved upon it, on diametrically opposite sides, two divisions of ninety degrees, one serving from the North Pole to the Equator, the other from the Equator to the South Pole. The inner ring, which represents the Equator, has the hours engraved upon it. On the bridge, which represents the polar axis, are engraved on one side the signs of the Zodiac, on the other the names of the months. When the dial is used, the cursor is set to the day, and the suspension-

slide, by which the instrument is carried, is moved to the required degree of latitude. The dial is then held with the flat side of the bridge towards the sun, so that rays of light pass through the hole in the cursor: the luminous spot falling upon the inner ring, will mark the hour of day.

The *nocturnal* (fig. 89) is an instrument for finding the time at night by means of the relative positions of the Polar Star and some other star or stars, usually the pointers of the Great Bear or the Bright Star of the Little Bear. In the simpler form it consists of two discs placed one upon the other, the larger having a short handle projecting from its circumference, the smaller turning upon a central axis pierced with a hole. On the small axis turns independently a rule which projects beyond the circumference of the larger disc. On the border of the larger disc are engraved the days of the year, the day on which the sun and the star to be observed have the same right ascension being placed opposite the middle of the handle. The smaller disc has the hours, and is also divided into 29½ parts for the days of the lunar month. It has a long projection, commonly with an engraving of the sun at the end, to indicate 12 o'clock, and usually a sequence of teeth or small projections round the edge: these projections enable the observer to tell the hour by touch when it is dark. On any night when it was desired to find the hour, the pointer or index on the smaller disc was set opposite to the right day of the month in the calendar engraved round the larger disc. The instrument was then held with its handle pointing vertically downwards, and the Pole Star was viewed through the hole in the central axis: finally the rule was set at the point where its edge was in line with the star under observation (e. g. the Bright Star of the Little Bear). The position of the rule upon the smaller or hour-disc then marked the time.

DICE. *See* p. 137.

DINANDERIE. *See* p. 263.

DIPTYCHS. *See* p. 151.

DRAUGHTS. *See* p. 136.

DRINKING-HORNS. *See* p. 99.

ENAMEL.

Enamel (derived, with the French *esmail*, *émail*, from the old Teutonic *smaltjan*, to melt) is glass powdered and fused to the surface of the object which it is desired to ornament: it is in fact a layer of melted glass, and may be applied to any substance

which can bear a red heat. Thus the glaze applied to pottery and porcelain, and the over-glaze colours of the latter, are essentially enamel, but the word is generally understood to mean glass fused upon the surface of a *metal* object in such a way as to form an ornament or design and, by implication, the object itself. The plain, uncoloured glass, which should contain oxide of lead to make it easily fusible, and should always be of uniform quality, readily combines with metallic oxides, which impart to it a variety



FIG. 90.—Gold brooch, with bust in cloisonné enamel: probably made in Italy about the seventh century.

of tints. If oxide of tin is added to glass coloured with any of these, the colour, which without it is translucent, becomes opaque; if oxide of tin is added alone to the plain glass, an opaque white is produced. The coloured glass produced by the agency of these oxides having been ground to powder in a mortar containing water, is placed in position while still damp, and fixed by firing in a furnace, several firings being always required. The surface of most enamels other than those described as painted (see below, p. 110) is finally ground and polished. In the following paragraphs a few technical points must necessarily be mentioned in describing different kinds of enamel, but to deal with the technical processes as a whole would be impossible in a general guide like the present: the reader is therefore referred for this

part of the subject to the useful books published in recent years by those who have taken a prominent part in the revival of art-enamelling in England, for instance those by Mr. H. H. Cunynghame, C.B. The great qualities of enamel are the durability and splendour of its colour; its limitations are due to the difficulty of producing gradation and accuracy of tone. A reasonable convention of style, producing much of its effect by suggestion, is



Fig. 91.—Gold brooch, German, eleventh century, with Byzantine cloisonné enamels.

therefore more suited to this work than laborious efforts after the exact imitation of nature.

The principal kinds of enamels are known by the following names:—

Champlevé, or *embedded enamels* (*émaux en taille d'épargne*), in which the vitreous powder is inlaid in cavities or channels cut in the metal ground (the base). This was the process employed by the Celtic enamellers, by the Romans, and afterwards by the mediaeval enamellers of Western Europe. The favourite metals for this style are copper and bronze.

Cloisonné, or *cell-enamel*, in which the enamel is placed in applied cells formed of thin strips of metal bent to any outline required by the design and soldered edgeways to the base, which, like the strips, was in ancient times usually of

gold. This is the method favoured in the Byzantine Empire, and in Europe during the earliest period of the Middle Ages. It survived as a subsidiary process during the Renaissance, and was introduced into China in the fourteenth century, probably as a result of contact with Byzantine civilization. The term *émaux de plicque* (or *plite*), which was once considered to have special reference to cell-enamels, is now regarded merely as the equivalent of *émaux d'applique*, i. e. small enamels, made independently, and applied to objects of larger size.

Enamel in openwork (*émaillerie à jour*) may be roughly described as cell-enamel without any base, the partitions forming a kind of grating. It only became popular in the fourteenth century, but was practised considerably later, as Benvenuto Cellini describes the method of its production in his Treatise on the goldsmith's art. A small iron caisson of the required shape was first made and the interior entirely covered with a fine coating of clay. The design was then set out upon the surface of the clay in fine strips of gold, as in cell-work, but the strips were not in any way fixed to the foundation. When the firing was completed, the enamel could be removed from the caisson, the clay coating preventing its adherence, and the artist had at his disposal a small panel or medallion somewhat resembling a miniature stained-glass window. Medallions of enamel in openwork were sewn upon garments of the time of Charles VI of France, but their full effect could only be obtained when they were placed in such a position as to transmit the light. A fine example of this work is a beaker of the late fourteenth or early fifteenth century in the Victoria and Albert Museum, decorated with a band of enamel *à jour*. This kind of enamel has been revived in modern times.

Translucent enamels on sunk relief (*émaux de basse taille*), usually for the sake of brevity called translucent enamels. In these the design is cut in relief in the metal, but below the surface so that even the highest parts which are to receive enamel do not quite reach the level of the surrounding metal. When the cavity has been filled with translucent enamel, the colour, which over the highest parts of the relief is pale, is darker over the lower parts, and finely graduated effects of light and shadow are thus produced. The metals used for the base are either silver or gold, as these give an added brilliancy to the colour laid upon them. This method was introduced at the close of the thirteenth century and in the two following centuries was extensively practised (see p. 122).

Incrusted enamels, in which objects in the round or in high relief are coated with enamel colours. The process was employed by the Greeks for jewellery, and was revived in Europe in the second half of the fourteenth century, but was especially popular with the goldsmiths of the Renaissance (see p. 124).

Mixed enamels. This expression has been employed to describe

objects in the decoration of which more than one of these processes are employed. Such objects are often transitional, such as the champlevé enamels in which cells are still employed in a subordinate manner (see p. 116); but they are not always so, as for instance in the jewels and mounts of the Renaissance, in some of

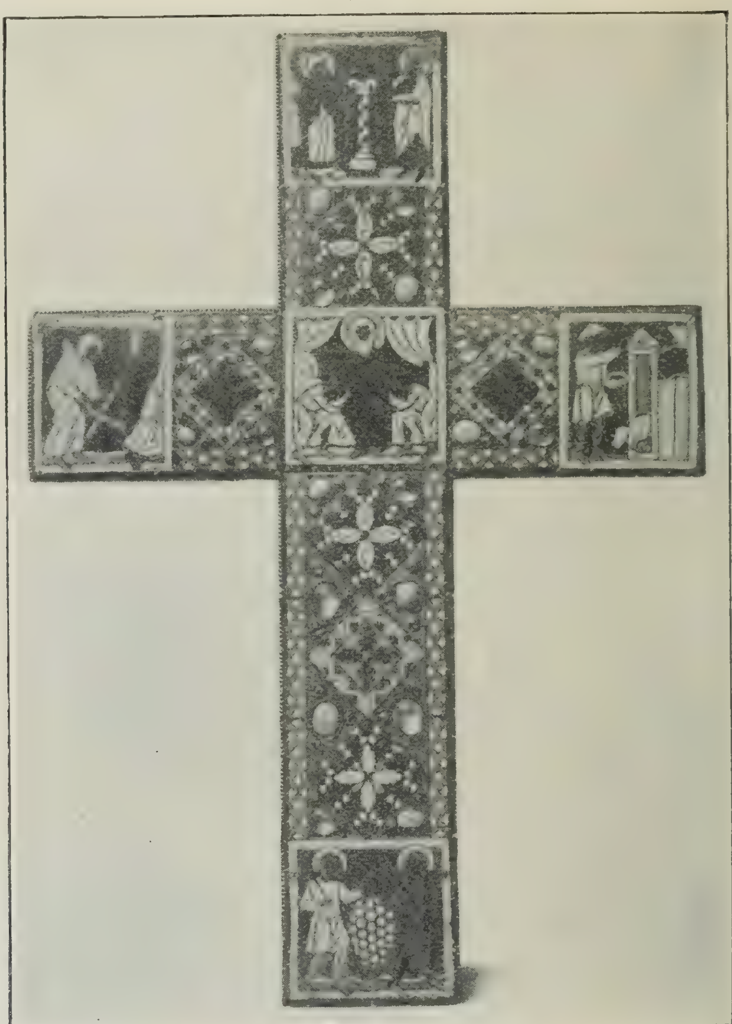


FIG. 92.—Enamelled cross attributed to Godefroid de Clare of Huy, late twelfth century.

which the incrusted, champlevé, and cloisonné methods are simultaneously found (p. 124).

Painted enamels. In these the enamel is thinly spread over the surface of the metal, chiefly by means of spatulas and points, though brushes are also used. The process allows the artists to copy elaborate pictorial compositions, the actual models being usually

woodcuts and engravings. The metal base is copper, and the objects decorated are flat or slightly convex plaques, ewers, tazzas, dishes, plate, salt-cellars, and other domestic utensils. Both sides



FIG. 93.—Enamelled plaques with inscription relating to Henry of Blois, Bishop of Winchester and brother of King Stephen (see p. 118).

of thin plaques have to be covered with enamel, which must be of equal quality. This is done because the metal expands and contracts more rapidly than the enamel, and its contraction on cooling would cause the enamel to peel and crack, unless the plate were held between two layers of glass. All enamelled plaques

executed in and after the sixteenth century have therefore a layer called the counter-enamel (*contre-émail*) on the back. Painted enamels began at the close of the fifteenth century, and reached their perfection at Limoges within fifty years ; but the art continued in various centres down to our own times, when it has been revived with great success.

Of the problems connected with the origin of enamelling and its early distribution in Europe, something has been said in the *Guide to the Antiquities of the Early Iron Age* (pp. 87 ff.) ; nor are we here directly concerned with the art as familiar to the Celts, Greeks, and Romans, or as possibly known at an earlier date to the peoples of the Aegean. It will suffice to recall the fact that it was practised in Europe as early as the middle of the third century B.C., and that very probably the Romans adopted it as a result of their contact with Celtic tribes. Both the Celtic and the Roman enamels are examples of the *champlevé* process (see p. 108), but the Greeks produced incrusted enamels in the form of ear-rings and other small articles of jewellery. The earliest examples of *cloisonné* enamel to which an approximate date can at present be assigned are certain jewels found in Nubia at Meroe, the ancient capital of Ethiopia, in a small vault near the top of a pyramid, in a lower and older part of which objects of a distinctively Roman character were discovered. There appears to be no certain evidence that the ancient Egyptians employed enamel to decorate metal objects, though it would have been natural and easy for them to have done so, since they were familiar with the use of vitreous glaze on pottery from an early period, and manufactured in great perfection jewels in which coloured stones were inserted in fine applied gold cells, producing an effect very similar to that of cloisonné enamel. This kind of jewellery was in later times made by other peoples of the nearer East, notably by the Persians, and it has been conjectured that it provided the models for the first cell-enamels which were made. Transmitted to the South of Russia before the foundation of Constantinople, it was handed on by the Goths to the other Teutonic peoples, displacing almost entirely in popular favour the enamelled work of the Roman period ; it was also popular in Constantinople, where, as in Western Europe, it persisted down to the tenth century. Several hundred years separate the Ethiopian jewels from the next cell-enamels which have come down to us ; for though there is literary evidence that such enamel was produced at Constantinople in the time of Justinian, and some writers are inclined to carry the date back to Constantine, the Christian examples which have survived are hardly earlier than the sixth century. Southern and Western Europe seem to have soon learned the process from the Christian East, for very early work was produced beyond the limits of the Byzantine Empire,

and two specimens are in the Museum collection. The first is a small circular brooch of Frankish workmanship ornamented with an enamelled cross in copper cells; the second is the gold brooch from the Castellani Collection (fig. 90), with its curious enamelled portrait bust, which the style of its goldsmith's work brings into relation with Teutonic jewellery produced in Italy towards the beginning of the seventh century. A group of several



FIG. 94.—Enamelled reliquary with the Magi, Limoges, thirteenth century.

other cell-enamelled brooches and ornaments usually ascribed to the ninth or tenth century is almost certainly of Western and not Byzantine origin. The Alfred Jewel in the Ashmolean Museum at Oxford belongs to this group, as do the Dowgate Hill brooch in the Museum collection and two remarkable brooches in the Museum of Copenhagen; the ancient reliquary from Herford in Westphalia in the Berlin Museum, with primitive cell-enamels in gold representing serpents and other animals, is also with probability assigned to the time of Charlemagne. The very rare Eastern-Christian enamels for which a sixth-cen-

tury date is claimed, include a reliquary at Poitiers said to have been sent by Justin II, a cross in the chapel called the *Sancta Sanctorum* at the Lateran, and a few articles of jewellery. With the eighth century, claims become more numerous, though the proof of age is difficult to obtain : among objects tentatively assigned to this period is the Beresford-Hope Cross in the Victoria and Albert Museum. It is permissible indeed to ask the question whether the tradition of Roman enamelling in Italy, on the Rhine, and in other provincial centres ever completely died out ; and whether its continuance might not account for the rapidity with which Teutonic craftsmen seemed to have learned a new branch of the art. Some enamels executed in Ireland have suggested that in that island there may have been a late survival of Celto-Roman methods carried across the Channel after the Teutonic invasion of Britain : and it has been argued that in the old industrial regions occupied by the Franks and other tribes, something of the old technical skill may still have lingered on, only requiring a hint for new development, such as that which might be given by Teutonic jewellery, to spring into renewed activity. But the influence exerted upon Western Europe at an early period by the southern provinces of the Byzantine Empire, and the probability that the Lateran Cross was made in those regions, suggest the introduction of the cloisonné process from the Christian East.

Some fifty cloisonné enamels of Western origin ascribed to the ninth and tenth centuries are preserved in the Church treasuries and Cathedrals of Europe, of which we need only mention the altar frontal of St. Ambrogio at Milan signed by Wolvinius, the iron crown of Monza, the chalice and paten of St. Gauzelin of Toul in Nancy Cathedral, the chalice of St. Rémi at Rheims, the crosses, book-covers, and portable altars at Trèves, Essen, Aix-la-Chapelle, and Milan, the Soltykoff cross in the Victoria and Albert Museum, and the great Sion book-cover in the same collection. In some of these Eastern inspiration is almost universally assumed, especially those made on the Rhine at the very end of the tenth century or later ; for there are historical reasons for supposing that Byzantine influence became particularly strong in the time of Otto III.

The great period of Byzantine enamel begins with the tenth century, and the finest work was done before the middle of the eleventh ; for though there are numerous examples ascribed to the twelfth century or even to the early part of the thirteenth, it is held that the decay of the Empire subsequent to the sack of Constantinople in A.D. 1204 probably dealt a serious blow to the art. Many examples which have come down to us are preserved in churches and monasteries in the Russian Empire, especially in Mingrelia ; but more accessible parts of Europe are fortunately also rich in fine specimens. This is especially the case with Venice, which not

only possesses the *pala d'oro* of St. Mark's, but a series of enamelled chalices, patens, and book-covers in the treasury of the same cathedral and in the Library of St. Mark. Among other Byzantine enamels in Europe are those in the Cathedral of Limburg on the Lahn, and at Gran in Hungary, the gospel-covers at Munich (Reiche Capelle, and Royal Library), Siena, and Milan ; the crowns of St. Stephen and Constantine Monomach at Buda-Pesth,



Fig. 95.—Enamelled ciborium in the style of G. Alpais, Limoges, thirteenth century.

and the imperial regalia and vestments at Vienna. The museums of our own country have still but little to show. The Victoria and Albert Museum, in addition to the Beresford-Hope Cross, has a small plaque with a bust of an apostle ; the British Museum a medallion with busts of St. Theodore and St. George, and the enamel of the brooch, fig. 91, which is in the Siculo-Byzantine style. The gold medallion with figure of Our Lord (Gold Ornament Room, Case W) is Italian work in the Byzantine style.

In Western Europe in the twelfth century the costly cloisonné process, adapted chiefly to objects of small compass, was generally displaced by the champlevé method which permitted the artists to cover surfaces of considerable dimensions. But we must not suppose any sudden readoption of this old process known to the Celt and the Roman, or the immediate disappearance of cell-enamels. Experiments in champlevé had been made at a much earlier period, a most curious example being the reliquary given by Pepin of Aquitaine (d. 838) to the Abbey of Conques in Rouergue, on which champlevé enamels in gold coexist with eagles executed in cell-work. Other very early examples of the coexistence of the two processes are the gospel-cover of the Abbey of Lindau, formerly in the Ashburnham Collection, also ascribed to the ninth century, and the famous Ardagh Chalice, assigned to about A. D. 900, in the Dublin Museum. On the other hand, cell-enamel is to be seen in a circular plaque representing St. Severinus, made in the Abbey of St. Pantaleon at Cologne as late as the end of the eleventh century, and this kind of work lingered on for another hundred years. Through almost the same period the old inlaid jewellery which cloisonné enamel had so largely displaced also survived in association with enamel both in Constantinople and in the West. Examples of this are to be seen on the portable reliquary of Bero-Münster, and the portable altar of St. Andrew at Trèves, both Western monuments of the tenth century; while a famous Byzantine instance of similar date is the above-mentioned reliquary of Limburg on the Lahn, the borders of which are inlaid with flat coloured pastes. These instances are sufficient to show how impossible it is to draw hard and fast lines between different stages in the evolution of particular arts.

But as the twelfth century advanced, the use of champlevé enamel, which had hitherto been only tentative, became general; and as we approach the year 1200 cell-work almost entirely disappears in the representation of the human figure. For small pieces of enamel intended to be mounted like precious stones, or as an accessory to incrusted enamels, it continued down to the Renaissance. The oval medallions on the border of the shield made for Charles IX of France are in cell-work, while in the fine enamelled mounts for cups made at the same period the process is used simultaneously with others (see examples in the Waddesdon Room). The magnificent hilts of the swords of Boabdil, the last King of Granada, are also ornamented with cloisonné enamel in translucent colours, as is Moorish jewellery of the same period. The fine chalice in the Cathedral of Seville, with cloisonné medallions in the Moorish style round the base, shows that the method survived in Spain until the sixteenth century; and the head-stall in Table-Case **A** which, though possibly made in Venice, shows strong oriental influence, is not

far removed in date from these remarkable objects. A derivative variety of cell-enamelling was practised in France in the same century, small plaques and medallions of glass being enamelled with ornament in the style of the well-known designer Étienne de Laulne. The design was cut in a piece of glass, the channels or cavities all expanding from the top to the bottom. Into these a lining of gold-foil was pressed, the edges showing at the top, and forming outlines to the enamel with which the cavities themselves were filled. The Museum has several examples of this work (cf. fig. 15), one forming the back of a watch-case. A process somewhat similar to this had been employed in Ireland some five hundred years earlier. On the Ardagh Chalice, already mentioned, designs are cut in button-like discs of enamel, and the cavities thus made are filled with enamel of another colour, though without the interposition of gold-foil. While mentioning Irish enamels, which occupy in many respects a unique position, we may mention the survival, also in the Ardagh Chalice, of a process which originated in Celtic times, and is in some respects analogous to cloisonné enamelling. It is well illustrated in the bronze shield of about the beginning of the Christian era in the British Museum, found in the Thames at Battersea. Here an open framework of metal, all cut out of one piece, was imbedded in the surface of the enamel while still soft, giving to the whole when the process was completed the appearance of enamel disposed in separate cells. In the Ardagh Chalice this process is not only found alone, but combined with the champlevé method, the same piece of metal serving for both. It has already been suggested that the exceptional development of the art of enamelling in Ireland may be due to an independent development after the Teutonic invasions had destroyed or crippled the Roman civilization in England. In the fifteenth and sixteenth centuries a process somewhat resembling cloisonné enamelling was popular in Hungary, designs filled with enamel being outlined in silver wire. Some Hungarian archaeologists compare this style of work with painted rather than with cloisonné enamels, regarding the silver wire as a simple element of decoration, like the gold threads in embroidery, and not as a support containing the enamel. Work of a similar kind was also made in Friuli, and in Spain, where paxes of the late fifteenth or early sixteenth century have enamels in which the colours are separated by filigree. There is a certain analogy between this work and the delicate enamelled flowers outlined in wire made by the Greek jewellers before the beginning of our era: it has even been suggested that the reappearance of the kindred process in Central Europe may have been due to the survival of ancient traditions in the Balkan Peninsula.

It was in the first half of the twelfth century that champlevé

enamel began to be regularly applied to the decoration of Church furniture in two distinct regions of Europe; in the North on the Rhine and the Meuse; and in the South at Limoges. It is still disputed which of these centres was the earliest, and whether one decisively influenced the others. The balance of opinion has usually inclined in favour of the Northern area, where the artists show greater learning and literary capacity, evinced by the elaborate parallelisms between the Old and New Testaments in their subjects, and the frequent employment of accompanying inscriptions. Further, it is certain that Suger, Abbot of St. Denys, employed goldsmiths from Lorraine to decorate with enamelled subjects a cross made in honour of his patron saint, and consecrated by the Pope in 1147. At this period Lorraine included Cologne, a fact which lends additional interest to a portable altar belonging to the Guelphic treasure now in the Museum of Industrial Art at Vienna, inscribed *Eilbertus Coloniensis me fecit*, and decorated with enamelled panels representing biblical scenes and figures of prophets, all in the style of the early twelfth century. The curious medallion in the Museum collection, representing Henry of Blois, Bishop of Winchester and brother of King Stephen (Table-Case **E** and fig. 93), was probably executed between A.D. 1139 and A.D. 1146, and is certainly in the German and not the French style; and the very early enamelled crozier now in the Bargello at Florence, signed by *Frater Willelmus*, though claimed for France, has peculiarities which seem on the whole to accord more closely with the German tradition. Again, there seem to have been relations in A.D. 1181 between the Limousin Abbey of Grandmont and the Abbey of Siegburg on the Rhine. But M. Molinier has contended that champlevé enamels with monsters and animals upon a reliquary in the treasure of Conques, dated A.D. 1137, were made at Limoges, and that other enamels, such as those upon a reliquary at Bellac (in the Limousin), have the same origin: further early champlevé enamels of similar character, formerly in the collection of M. Sigismond Bardac, have inscribed on them the name of St. Martial, the patron saint of Limoges. French archaeologists also claim for Limoges the remarkable panel formerly in the Cathedral of Mans (now in the Museum of that place) representing Geoffrey Plantagenet, though M. Darcel was inclined to see a probable Rhenish influence in the predominance of green and yellow. The same claim is made for the enamelled plaque in the Cathedral of Bari in the South of Italy. Whatever the truth as to origin may be, the matured styles of the two areas are distinct, and a few of the more salient points of difference may be mentioned here. In the North, the figures are generally upon a plain metal ground on which are enamelled the inscriptions referring to the subjects represented; the faces are also reserved in the metal, and the outlines filled in

with blue or red enamel: turquoise blue is a conspicuous colour, and there is a predilection for greens and yellows. At Limoges,



Fig. 96.—Enamelled panel with St. John the Evangelist, Limoges, thirteenth century.

there is a preference for lapis-lazuli blue, which is very commonly used as a ground and diapered with coloured rosettes and circles; inscriptions are rarely found; figures are often applied, wholly or in part, in relief; and metal grounds are either ornamented with cabochons in raised settings, or engraved with a peculiar floral scroll which is seen on the rectangular casket in Wall-Case 28 and on the casket in the Waddesdon Bequest.

Among the earlier objects produced in both centres many serve to mark the transition between the cloisonné and champlevé processes, the former method being often actually retained in association with the latter, especially in details such as the portions of design upon garments, while in parts of the champlevé work the imitation of cloisonné originals is evident. A good example of both these features is to be seen in a book-cover of the late twelfth century formerly in the Spitzer Collection, where the little discs forming a pattern round Christ's garment are enclosed in applied circles of metal, while the numerous narrow gilt lines indicating the parallel folds of the drapery, though all actually reserved in the metal, produce the general effect of applied strips. In the cross (fig. 92), the small rosettes in the ornamental borders are outlined with applied strips of metal.

Few names of the early enamellers are recorded. The signatures of Eilbert and Willelmus have already been mentioned. A ciborium in Paris in the same style as fig. 95 is signed by G. Alpais; the name of Aimeri Chrétien is found on the *chef*, or reliquary for the head of St. Ferréol in the church of Nexon (Haute Vienne). Nicholas of Verdun made the enamels at Klosterneuburg near Vienna at the end of the twelfth century, and a reliquary by him at Tournai is of the year 1206. A whole group of Northern enamels is assigned to Godefroid de Claire of Huy, who worked at Liège, Maestricht, and Cologne in the third quarter of the twelfth century: these are represented in the collection by the cross (fig. 92) and other pieces. At first the enamellers were monks, or attached to the monasteries; later they attained an independent position and occupied workshops of their own. In France they had not, however, formed a corporation at the time when these bodies were first registered, and are not mentioned in the *Livre des Métiers* of Étienne Boileau. Only five enamellers are mentioned as living in Paris in the year 1292, one of them, named Richardin, being described as a Londoner.

This point raises the question as to the condition of the enameller's art in England in the Middle Ages. Something has already been said on the subject of cloisonné work. The champlevé process, so familiar in late Celtic times, seems to have died out before the Norman invasion, but when it was reintroduced from the Continent, English craftsmen must soon have learned

to employ it. Yet in the thirteenth century important pieces of work were still ordered from France. Thus we learn from the Custumale Roffense that about the year A.D. 1276 the executors of Walter de Merton, Bishop of Rochester, caused an enamelled tomb to be made by Maître Jean de Limoges; and



Fig. 97.—Enamelled stall-plate of Edward Seymour, Earl of Hertford, afterwards Protector; dated 1537.

it is probable that the fine enamelled effigy of William de Valence (d. 1304) in Westminster Abbey is also of French origin, as his family had possessions in Aquitaine. For a long time we find few examples of champlevé enamel which can be fairly claimed for this country. Some of the armorial pendants (Wall-Case 33) may be English, and the two medallions found in Bedfordshire, with the arms of the Abbey of Warden (Table-Case **E**),

have been ascribed to English workmen. For the sixteenth century there is better evidence, as the series of enamelled garter-plates then begins (Table-Case **A** and fig. 97). In the seventeenth century the process continued to be popular, though the enamels were often left unpolished and brass instead of copper was commonly used for the base. Numerous candlesticks (fig. 98), fire-dogs, &c., were ornamented in this fashion in the reign of James I, and the same kind of work was simultaneously produced in Russia in the manufacture of ikons and ornamental objects. Under the later Stuarts enamelled medallions were made to be used as centre-pieces for pewter dishes (Table-Case **E** and fig. 164).

There is evidence that champlevé enamels were also made at an early date in Spain, the oldest perhaps going back to the twelfth century, to which period some of the objects of the treasure of the Abbey of Silos now in the Museum at Burgos are ascribed. In the three succeeding centuries a large number of armorial pendants (fig. 52) were made in Spain, and certain ciboria and processional crosses which differ in colour and design from the contemporary work of Limoges may very well be of native manufacture. It is conjectured that the 'Émaux d'Arragon' of the inventories were probably champlevé enamels. At Barcelona jewellery of the sixteenth and seventeenth centuries was still ornamented in this style. Champlevé enamel lost its popularity after the first half of the fourteenth century, when translucent enamel or sunk relief came into fashion. The change was perhaps not unconnected with the great extension of architectural motives in church metal-work; for the tracery and pinnacles of the Gothic style left fewer flat surfaces to be decorated in colour.

The *émail de basse taille*, as has already been stated, is usually upon silver or gold, and therefore does not attain the great dimensions of the larger champlevé examples. The process appears to have originated in Italy, a country which produced few champlevé enamels; and the earliest examples of its use go back to the close of the thirteenth century. The names of Giovanni Pisano and Duccio of Siena are associated with this branch of the art, a chalice of the Convent of St. Francis of Assisi bearing the name of Duccio, with the date A. D. 1290. Among the more famous monuments of the period which followed are the silver altars of Pistoia and Florence (*Opera del Duomo*), and the reliquary of Orvieto Cathedral, the latter bearing the date A. D. 1338. From Italy this style of enamelling seems to have rapidly spread into France, Spain, and Germany, and was freely employed in the decoration of chalices, diptychs, and other objects of religious use, as well as for personal utensils and ornaments. In France the most admirable work was produced, and in the Royal Gold Cup, in the Gold Ornament Room (fig. 171), the Museum possesses an example of French work of the most splendid description. Translucent

enamels of fine quality were made in Germany by the middle of the fourteenth century; and though documentary evidence is wanting, it is supposed that Cologne was a centre of this work, of which a small example is shown in fig. 15. The enamel described in early inventories as *Esmail de la façon d'Espagne* is considered to have been translucent, the centres of production being Barcelona, Valencia, and Gerona in Catalonia. There was probably



FIG. 98.—Enamelled brass candlesticks, English, seventeenth century.

a relationship between the work produced in these places and that from Montpellier, part of which was held by Aragonese princes between A.D. 1204 and A.D. 1349. Translucent enamels were also made in England. The fine Standing-Cup belonging to the Corporation of King's Lynn, known as King John's Cup, and dating from the time of Edward III, is even claimed by some authorities as English, though its general character rather suggests a French origin. Documentary evidence also leads us to infer that English goldsmiths were able to produce work of this kind.

Thus in A.D. 1370 Walsh and Chichester, goldsmiths of London, made for Edward III a silver-gilt cup with enamels, which were in all probability of the translucent variety.

Incrusted Enamels. In this variety the vitreous ornament is treated merely as an adjunct to plastic work in the precious metals, the enamel being applied to figures in high relief or in the round, a process offering considerable practical difficulties, but practised before our era by Greek and Etruscan jewellers. For the period before the sixteenth century, when sumptuous enamelled jewels began to be made, incrusted enamel is but scantily represented. But we know from the inventories of Charles VI of France (1380–1422) that the royal treasure contained several statuettes of the precious metals enamelled in this way; and a most interesting example of this early period has come down to us in the so-called *Rössl* of Altötting in Bavaria, a devotional group perhaps made as early as A.D. 1385, on the occasion of the marriage of Charles VI and Isabeau of Bavaria. It was, however, after the Renaissance that this method of enamelling was largely employed by the makers of pendants, jewels, and mounts for cups, who worked in Italy, Germany, and France. Examples of their sumptuous productions may be seen in the Waddesdon Bequest (Nos. 147 ff.). They did not confine themselves to incrusted enamel, but also executed ornamental designs in translucent colours by the champlevé process, the base being generally gold. Occasionally they introduced enamel in cells.



Fig. 99.—Pax with Italian painted enamel, sixteenth century.

We now come to the last division, *Painted Enamels*, in which elaborate compositions were reproduced after engravings of well-known pictures.



Plate VIII. Enamel representing the Dauphin, Son of Francis I.
By Léonard Limousin.

[*See* p. 128.

It is considered probable that the new method originated in the workshops of the glass-makers. Early mediaeval windows were a mosaic of variously coloured glass, across which only the outlines of the design were painted in brown enamel. But towards the close of the fifteenth century white glass was used, and several colours were applied to the same piece. Some of the enamellers of Limoges were glass-painters, and it is possible that the idea of using metal instead of glass as a base may have suggested itself to them in the course of their work. It is, however, a matter of dispute whether the experiment was first made in France or in Italy, for the new process appears almost simultaneously in both countries. In Italy the Venetian glass-maker Beroviero and his friend Filarete produced painted enamels on metal, and it was in Italy that the French artist Jean Foucquet acquired a taste for this work, inserting enamelled medallions in the frames of his pictures. In the Dresden Museum there is a diminutive painted enamel upon a reproduction by Filarete of the celebrated statue of Marcus Aurelius, the date of which is A.D. 1465. But certain small pieces of painted enamel in the Museums of Poitiers and Compiègne, perhaps intended to adorn ladies' girdles, have on them figures in the costume of the period of Charles VII (1422–1461), a fact which induced M. Molinier to believe that the introduction of the new method was as early at Limoges as it was in Italy. Painted enamels in the latter country were never produced on so extensive a scale as at Limoges, where the traditions of centuries of enamelling were still vigorous. Isolated artists seem to have worked in the Northern cities, but their activity ceased by the middle of the sixteenth century, at the very time when the engravings of Italian masters were being most sedulously copied in France. The pieces which have been preserved are of small size, medallions, diptychs, paxes, and plaques for the decoration of crosses and other objects. The metal base is usually copper, but silver is occasionally preferred, in which case the background and some of the outlines are sometimes engraved and filled with translucent enamel. Some of these early Italian examples are works of admirable refinement, and the medallions in the collection (Table-Case E) with portrait-heads and translucent red grounds have affinities with the Milanese School of painting: the larger panel representing the Crucifixion, by Joannes Ambrosio di Landriano (Wall-Case 31), is of exceptional size, and may have been produced under the influence of Limoges. Painted enamels of a purely decorative kind, in which the designs are formal and include no figures, were made in the sixteenth century at Venice. They consist of ewers, flagons, bowls, dishes, and trenchers, which were coated with white, dark blue, and green enamel in large zones or panels, the whole surface being subsequently covered with fine arabesques in gold. Examples of this

work are contained in the collection (Wall-Case 32 and Table-Case E).

The history of the painted enamel of Limoges has been so often written, in works so generally accessible, that here it is only necessary to give a general outline of its development, and to mention the more important artists, especially those who are represented in the collection. For purposes of practical convenience these enamels may be divided into four periods. 1. The *Early Period*, from the last quarter of the fifteenth century to about A.D. 1530. 2. The *Period of the Fine Style*, from A.D. 1530 to A.D. 1580. 3. The *Period of the Decline*, from A.D. 1580 to the end of the first quarter of the seventeenth century. 4. The *Period of Final Decadence*, from that time to the close of the workshops in the eighteenth century.

In the first period a brown background was employed on which the figures were first painted in white, the polychrome portions being covered with translucent colours: black lines were freely used in the draperies and outlines. The effect was then heightened by picking out the lights and lesser details with gold; and as small discs of foil, simulating gems, were placed beneath the enamel on the borders of garments, &c., the result is often very brilliant. The flesh tints have a violet tone, and the white enamel is often so thick as to have the appearance of relief. The subjects, which are usually religious, are borrowed from Flemish and German prints, and in many details they seem to show the influence of the designers of tapestry. Two names may be mentioned in connexion with the Early Period: Monvaerni, whose signature is found on a few pieces dating from the close of the fifteenth century, and Nardon (Leonard) Penicaud; the latter, the first member of a distinguished family, was born about A.D. 1474 and was still alive in 1539. A considerable number of triptychs, diptychs, and panels are assigned to him and to his school; among them is the panel in Table-Case E (fig. 100).

In the Second, or *Fine Period*, the influence of the Italian Renaissance became paramount, and such traces of mediaevalism as still clung to the work of the earlier masters disappeared. The scheme of colour was now less sumptuous, and the plates of copper employed were thinner and more convex. To this period belong all the most familiar names, of which we can only make a brief mention. Jean Penicaud I is still transitional, but Jean Penicaud II (who often signs P. I., for Penicaud junior), and Jean Penicaud III, definitely abandon the use of a white ground for the whole of their figures. Both were artists of merit, especially the last, who designed many of his own compositions, and was not content, like the majority of enamellers, to remain a copyist. The Penicauds were the first to popularize painting

in *grisaille,* i.e. the style in which the figures are entirely or almost entirely executed in opaque white enamel on a black background. Many of their pieces have stamped on the back the monogram shown in figure 101, which was the mark of their workshop and their school, and need not always imply their own participation in the work. Two artists, one known by the name of M. Pape as well as by various initials and monograms, and the other by the initials K I P, belong



Fig. 100.—Enamelled panel: school of Nardon Penicaud.

to the Penicaud atelier. Both produced work, usually in grisaille, of the finest quality. The Museum contains several examples of enamels by Jean Penicaud II; and the series of plates with the story of Psyche is ascribed to Jean Penicaud III. A most prolific artist, especially in grisaille, is Pierre Reymond, who is well represented in the collection. He was born at the beginning of the sixteenth century, and died about A.D. 1584. The few polychromatic enamels which he has left are thought to

belong to his earlier period, during which he copied German designs. At the height of his career he was under Italian influence, but at the end of his life he reproduced the motives of famous designers of ornament like Étienne de Laulne, Du Cerceau, and De Bry. Over-production prevented him from doing full justice to his talent; his figures are often hard, and the effect marred by an excess of black shading, suggesting the methods of the wood engraver. His greater contemporary Léonard Limousin (b. about A.D. 1505, d. before A.D. 1577) fell under a similar succession of influences in the course of a long career. He also painted figure-subjects in colours and in grisaille, for the former sometimes employing a white background; but he is chiefly known as an admirable painter of portraits, and has left numerous panels and medallions, usually with blue backgrounds, representing great personages of his time. They are somewhat hard, and less free in style than his decorative work; but when the difficulties of the process are considered, they must be regarded as works of remarkable fidelity and distinction. The Museum possesses good examples of his portraiture in the busts of Catherine of Lorraine and of a Youth, in the Waddesdon Bequest, and that of the dauphin, son of Francis I, in the Mediaeval Room (plate VIII). It must suffice to mention one other artist of this period, Couly Nouailher (Noylier), the first enameller of a family which continued to furnish representatives of the art during the seventeenth and eighteenth centuries. His grisailles are somewhat feebly drawn and archaic in style.



Fig. 101.—The Penicaud Stamp.

The *Period of Decline* is marked by a minute style, in which foils are used to excess, and both the backgrounds and the costumes of the figures are bright with rich green, blue, and purple tints. The enamellers who represent it chiefly belong to the families of Court, de Court, and Limousin, whose genealogies and relationships are often confusing. The Waddesdon Bequest is rich in works by these artists, especially by Suzanne de Court, whose dead white flesh tints are seen in strange relief amidst a profusion of rich colours frequently heightened by foil.

To the *Period of Decadence* belong great numbers of plaques and medallions, frequently ornamenting *objcts de piété*, and distinguished by a hard scheme of colour in which an orange red is conspicuous. Little can be said in favour of these productions, which are faulty in design and insipid in their general effect. The enamellers chiefly belong to the families of Nouailher or Laudin, and the best among them is Jean Laudin, an example of whose polychrome work is seen in Table-Case **E**. It was

probably a pupil of the Nouailhers who introduced painting in enamel into Russia, where it became a popular means of decorating bowls and cups with flowers, among which the tulip is conspicuous (Table-Case **A**). Painting in enamel was widely practised during the seventeenth and eighteenth centuries, chiefly to decorate small plaques used for ornamental purposes: a large German cup in the Waddesdon Bequest (No. 126) is covered with such plaques. Special mention should be made of the work of Jean and Henri Toutin, who in the second quarter of the seventeenth century painted in colours on a white ground, using gold as a base, and restricting themselves to objects of small size. A white ground had been sometimes employed by Léonard Limousin for his plaques, but Toutin with his smaller productions, watch- and locket-cases, diminutive plaques with portraits, &c., was the real initiator of a style which was first imitated by the watchmakers of France (Blois) and other countries, and culminated in the fine miniatures of Petitot, Bordier, and Zincke. The work in all these cases was really over-glaze painting, the ground being finally prepared and fired before the miniatures were begun. Produced at a time when the art of Limoges was entirely insignificant, many of these small enamels, with their vigorous battle and other secular scenes, are all the more worthy of note. Two examples of Toutin's work are to be seen in Table-Case **E**, while enamelled watch-cases of the seventeenth century are among the collection of watches in Table-Case **G**. In the eighteenth century gold snuff-boxes, étuis, &c., of beautiful finish and decorated with pastoral and other scenes in enamel were produced in great numbers in France. Similar work was done at Vienna, Dresden, and elsewhere. The well-known Battersea enamels which began to be made in the second half of the century were inspired by the same spirit, and though eminently pleasing in effect and often of spirited design cannot claim to equal the French work in execution. At Battersea the base was not gold but copper, and the products of the factory founded about 1750 by Stephen Janssen were of the most varied description, toilette-boxes, sweetmeat-boxes, candlesticks, snuff-boxes, wine-labels, and all kinds of small objects are found in large collections such as that formed by Lady Charlotte Schreiber, now in the Victoria and Albert Museum. A small series of Battersea boxes and étuis is shown in Table-Case **L**. The enamels made at Bilston and Liverpool were of a cheaper and coarser type but assumed similar forms. In all three places the mechanical process of transfer-printing upon a plain enamel ground often took the place of design. Portraits, both miniature and of considerable size, were painted by W. H. Craft (d. about 1805) and Henry Bone, R.A. (1755–1834), examples of whose work are to be seen in Wall-Cases 31 and 32, and Table-Case **E**. Bone reproduced portraits by Sir Joshua Reynolds and other

artists, some of which are in the Wallace Collection. Enamelled portraits are frequent on French snuff-boxes of the period of the Empire (Gold Ornament Room, Case W).

ENSEIGNES. *See* p. 169.

EPISCOPAL RINGS. *See* p. 174.

EWERS AND BASINS.

These were important articles in the Middle Ages, for forks, as noticed elsewhere (p. 134), did not come into general use until the



Fig. 102.—Ewer (aquamanile), German, thirteenth century.

beginning of the seventeenth century, when they were introduced from Italy. They were brought round after every course, and water, often scented, especially in and after the fourteenth century, was poured over the guests' hands. They continued to be made after the introduction of forks, but were not then so essential as in earlier times. Examples are mentioned in inventories from

as early as the thirteenth century, but most of those which exist are of the sixteenth and seventeenth centuries. The mediaeval *aquamaniles* in bronze (fig. 102) were ewers employed for washing the hands, and the enamelled gemellions (Wall-Cases 27–30) served the same purpose. These gemellions (der. from the same root as *jumelles*, twins, because they were made in pairs) were evidently made at Limoges in the latter half of the thirteenth century, as may be gathered from the coats of arms which occur upon them and from the character of their ornaments. A few have sacred subjects, but the majority secular designs, though both classes seem to have been used for washing priests' hands. Perhaps most gemellions were used at meals in the hall or refectory, the water being poured out of the spouted bowl, while the other was held beneath the guest's hands to receive it. These rather awkward double basins were ultimately superseded by the more convenient ewers and basins. They are mentioned in many English inventories and wills from the time of Edward I onward. The silver ewers and basins in the Museum Collection are almost all of German work and are in the Waddesdon Bequest.

FANS.

Folding fans opening into a semicircle were probably known before the sixteenth century, the use of the ecclesiastical *flabellum* (see next page) being so ancient. Though they do not appear to be represented in MSS. or monuments earlier than the Renaissance, fragments are said to have been found in the ruins of the Castle of Pierrefonds, in France, in a position which indicated an earlier date than A.D. 1422. The Japanese are reported to have known the folding fan as early as the seventh century of our era.

FEDE-RINGS. *See* p. 175.

FIRE AND LIGHT.

Fire, method of obtaining. The flint and steel was the ordinary instrument for making fire in the Middle Ages, the steel being often artistically mounted in bronze or silver. As early as the fourteenth century small wooden sticks dipped at one end in sulphur were used for lighting purposes, as they appear to have been in Roman times. These were not matches in the modern sense, not themselves producing fire by friction, but used to obtain a flame more quickly from tinder already ignited by the flint and steel. Friction-matches only came into common use about 1830, about which time the rush-lights of our ancestors were generally displaced by candles. The burning-glass in the

form of a lens of crystal was occasionally used, especially for procuring the new fire at Easter.

Houses and churches were illuminated by candles and lamps; but very few lamps other than those used in churches have been preserved. The larger kinds were often in the form of metal circles (*coronae*) pierced with holes in which small conical glass receptacles for oil were placed. Candles were of wax or tallow according to quality, and were made in wooden moulds.

A primitive form of taper made of rushes coated with wax survived down to about the middle of the nineteenth century. These rush-lights were fixed in iron holders of the kind shown in Wall-Case 49, or when used as night-lights in the centre metal drums, the sides of which were perforated with circular holes.

FLABELLA (muscatoria).

Fans were adopted in Early Christian times to drive away from the bread and wine the flies and insects so numerous in hot climates; they were held by two deacons standing on either side of the altar, and waved during the consecration. They were of the shape of hand-screens, the handles being usually of carved ivory or wood, and the upper part, which was almost circular, of linen, feathers, silk, or parchment. Mediaeval Western inventories frequently describe these fans: thus a Salisbury inventory of the thirteenth century mentions examples of silk and parchment, and that of St. Faith's Church beneath St. Paul's, London, an example with peacock's feathers: again, in 1346, Hamo, Bishop of Rochester, gave to a chantry founded by himself a silk fan with an ebony handle. The flabellum fell into disuse at the close of the Middle Ages, and is now only used in papal processions. In the Greek Church, however, it survives under the name of *Rhipidion* (*Guide to Early Christian and Byzantine Antiquities*, p. 104).

FLAGONS. *See* p. 95.

FLINT AND STEEL. *See* p. 131.

FORGERIES.

It is not intended to discuss the various classes of spurious antiquities which are always in circulation; but there is one common class which is so constantly being brought to the Museum that it is desirable to say a few words upon the subject and accompany them by an illustration (fig. 103). Nearly fifty years ago, during excavations for a new dock at Shadwell, some two thousand so-called leaden 'pilgrims' signs' were produced as discoveries made during the work. These ultimately proved to have been made by two illiterate, but ingenious, mud-rakers,

whose moulds were discovered ; and shortly afterwards the production of similar objects was continued by two men known as Billy and Charley living in Rosemary Lane on Tower Hill. The things were made of lead or of 'cock metal', an alloy of copper and lead, and took the form of medallions, daggers, vases, hollow figures representing ecclesiastics, triptychs, &c. The medallions bear figures and busts of kings, armed knights, &c., in low relief, surrounded by sham inscriptions including a date (often 1001 or 1021) in Arabic numerals. It is needless to point out that the kind of armour depicted does not accord with the period suggested, and that Arabic numerals were not employed for dates in the eleventh century (see p. 216). These forgeries, which exist in thousands and show an astonishing variety of types, are now very widely distributed



FIG. 103.—Lead and bronze forgeries.

over England, and are often actually excavated because they have been purposely placed in the earth. It is hoped that the publication of this note may deter those interested in remains of mediaeval date from acquiring as genuine antiquities objects of no archaeological interest or value.

FORKS.

Forks, though known in more ancient times (Saxon example in

Anglo-Saxon Room, Table-Case H), were not generally employed in the Middle Ages. During the whole period the fingers alone were used ; this custom, together with that of two eating from one dish, made the careful washing of the hands before and after meals a necessity, and accounts for the important place in the domestic economy of ewers, basins, and rose-water dishes. The daughter of Constantine Ducas, Emperor of the East, who married the Doge Domenico Silvio, is said to have used forks at the close of the eleventh century ; and in the famous illuminated manuscript of Herrade von Landsberg (the *Hortus Deliciarum*, about A. D. 1180), they are twice represented. From the thirteenth century they are more frequently mentioned, though they were evidently intended for dessert and sweetmeats, not for eating meat. A fork occurs in the inventory of Edward I ; but Piers Gaveston, favourite of Edward II, had only three or four forks to sixty-nine silver spoons, and these are described as used for eating pears. Forks in the inventory of Charles V of France (A. D. 1379) are of gold, the handles set with gems, and were also intended for eating fruits only. At the end of the fourteenth century forks are first mentioned with spoons, but they are still great rarities, and of high intrinsic value. They do not appear to have been employed for eating meat until the sixteenth century, and even then the reform was not general in all countries. In England the fork was not commonly used until the first half of the seventeenth century, probably in imitation of the Italian fashion, as may be gathered from passages in Ben Jonson, Coryate and other writers. Silver forks were only used in small sets even at the end of the seventeenth century, but it was then still the custom for each guest to bring his own, so that even large houses required few. To this custom was due the manufacture of folding-forks with hinged handles, easily carried in a case in the pocket (plate XIII). The ancient fruit-forks probably had only two prongs, and even the oldest dinner-forks only three. Four-pronged examples, though known in the first half of the eighteenth century, were not common before the reign of George III.

GAMES AND SPORTS.

Only a few games can be here mentioned, chiefly those represented by objects in the Museum collections. The wide subject of field sports, tilting, and other knightly diversions of the Middle Ages, has of necessity been omitted ; but attention may be drawn to the representations of sports and games upon the ivory mirror-cases and writing-tablets in Table-Case F. It will be noticed that hawking-scenes are specially popular, and that the rather boisterous games played in the halls of castles are represented by a guessing game like 'Hot Cockles' in which one of the players

is blindfolded. The following short notes upon particular games or the apparatus with which they were played may be of interest.

In connexion with hawking, which fell into disfavour after the Civil Wars owing to the introduction of sporting fire-arms, a small gold *vervel* (Gold Ornament Room, Case W) inscribed *Sum regis Anglie et Comitis Herfordie*, and belonging to Henry IV, should be noticed. Vervels were small flat rings, usually made



FIG. 104.—Ivory chessmen from the Island of Lewis.

in pairs, attached to the jesses or leather thongs by which the hawk was held on the fist. They were often of precious metal and had the names of their owners engraved upon them as in the above example. Small globular bells were attached to the hawk's legs by leather rings called *bewits*; and when the bird was not flying a hood or cap was placed upon its head.

The game of *chess* is first heard of in India, where it was known perhaps before the eighth century. The Arab historian Masudi, indeed, speaks of it as already known to the Persians in the sixth century, and through Persia it passed into the Byzantine Empire. It had certainly reached Italy in the eleventh century, and must

soon have become familiar to the peoples north of the Alps : it is possible that chess became independently known to the Scandinavian navigators about the same time through direct intercourse with the East. The traditional stories, repeated in mediaeval romances, that the game was played by Charlemagne and his peers, are not considered trustworthy ; and other evidence brought forward in support of Carlovingian chess has not won universal acceptance.

Among the most ancient chessmen in existence are those found in 1831 on the coast of the Island of Lewis, where they were probably lost by shipwreck in the twelfth century, to which period they belong. They formed part of no less than seven sets, and a considerable number, acquired by the Museum in 1832, are exhibited in Table-Case **L** : the costumes of the figures are Scandinavian (fig. 104). A fair number of chess-pieces of the later Middle Ages are in existence, a few being exhibited in the same case : in some instances the principal figures are of elaborate construction and form the centre of a subsidiary group, the whole being cut from the solid as in the case of the bishop there shown ; but the popularization of the game rendered necessary the use of simpler conventional forms, such as the Arabs had already employed, and these are usually seen represented in mediaeval illuminations. Such representations of chessmen and boards are frequent, for chess was a favourite game in the castles of the knights and nobles, and a knowledge of it was part of a gentle education. It lost some of its popularity at the close of the Middle Ages, partly through the introduction of card-games.

The queen in chess, known in the Middle Ages as the *fierce* or *ferce*, had been already introduced into Europe by the eleventh century, and is found in the Lewis sets ; but in the oriental game this piece was called the prime minister. In a similar way, in Europe, the bishop ultimately replaced the elephant, as his mediaeval names *aufin*, *alfyn*, &c. (der. *alpil*, or *phil* = the elephant) sufficiently show ; but at different periods and in different countries an archer and a fool or jester have taken his place. The knight has undergone little essential change ; but the history of the castle is more complicated. In the Lewis sets 'warders' or foot-soldiers with shields represent the castles ; but an early form was an elephant with a tower on its back, and this has been retained in the North of Europe. In Southern Europe, France, and England the tower was adopted without the elephant, and was conventionally represented with a bifurcating top, a form probably introduced by the Arabs. The piece was formerly known as the *rook*, the name being derived from an oriental word, perhaps the Persian *rokh*, a hero.

Draughts. The game of draughts, or *dames*, though in existence throughout the period, is not mentioned by mediaeval writers so

frequently as chess. Its origin is obscure, and it probably differed from the game as now played. A set of men from Taplow, perhaps dating from as early as the sixth century, is exhibited in the Anglo-Saxon Room, Wall-Case 28.

Tables was another popular game in the Middle Ages, and resembled our backgammon, being played with dice and pieces on a board marked with lines. As an aristocratic amusement it rivalled chess, and the MSS. have several miniatures showing people playing it. It still had the name of tables in Shakespeare's time (see *Love's Labour Lost*, Act V, Sc. 2), the name of backgammon coming in during the seventeenth century. Dice, which had been commonly employed by the peoples of antiquity, were used throughout the Middle Ages not only for backgammon, but for simple hazard; in the twelfth century, John of Salisbury mentions ten distinct games with dice: the Museum has no dice known with certainty to be of mediaeval date, though many examples of earlier periods.

Cards were introduced into the West of Europe before the middle of the fourteenth century, probably from the East. A miniature in a French MS. in the British Museum (MS. Add. 12,228, fol. 313) written between 1330 and 1350 shows a royal party playing cards, and it appears that the pack of fifty-two cards was already in use at that period, though its composition was not definitely settled. This pack alone found favour in Spain, Northern France, North Germany, England, and other European countries, while the South of France, South Germany, and Italy used side by side with it a pack of seventy-eight cards known as the combined tarot pack; this seems to have been introduced in Italy in the fifteenth century as a result of fusion between the shorter numeral pack, and a series of emblematical designs called *tarocchi* or *tarots*. Cards were at first painted by hand, but in the fifteenth century they were marked by means of wood-blocks, and are among the earliest examples of printing. The large collection of playing-cards bequeathed by Lady Charlotte Schreiber

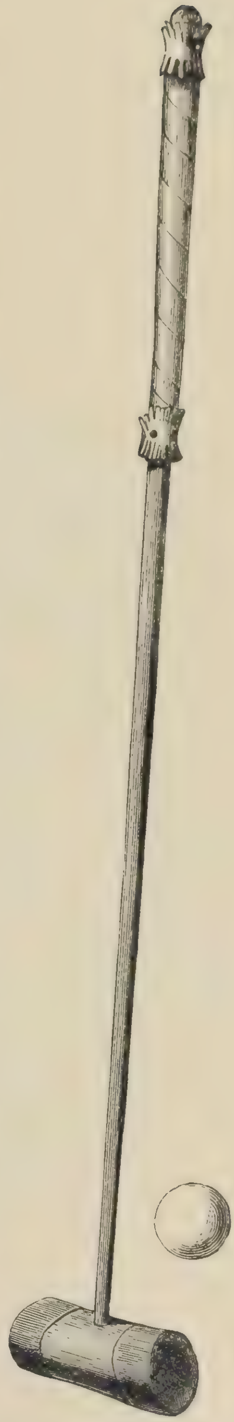


Fig. 105.—Mallet and ball for playing Pall Mall.

to the British Museum is in the Department of Prints and Drawings, and is described in a Catalogue published in 1901.

Pall Mall, or *paille maille*, was a game played with wooden mallets and a ball of boxwood (Wall-Case 49 and fig. 105), and was introduced into England towards the earlier years of the seventeenth century. It had been played in France at an earlier date, but seems to have been introduced into that country from Italy, for in the carnival songs of Florence of about A. D. 1500 mention is made of *palea a maglio*, and Leonardo da Vinci in his notebooks mentions the game played with the mallet as worthy of the painter's observation for the study of the human form in action. The name itself is in favour of such an origin, being probably derived from the two Italian words *palla*, a ball, and *maglio*, a mallet. Though King James I in his *Basilicon Doron*, written for his son Prince Henry, recommends 'Palle Maille' as a pleasant field game, its popularity in this country probably dated from the middle of the seventeenth century. In all likelihood the present Pall Mall marks the site where the game was played at this time; but after the Restoration, when it enjoyed its greatest vogue, a new Mall was made on the north side of St. James's Park and is frequently mentioned by Pepys. The surface was of well-levelled earth, while barriers were erected along the sides to keep the ball within bounds. The game seems to have consisted in striking the ball through an iron arch, or a ring suspended from a short stake, at each end of the Mall, the winner being the player who got his ball through arch or ring either in the smallest number of strokes, or in a number previously agreed upon. But in various early illustrations the arch or the ring are not constant features, and it is difficult to be sure what the nature of the goal really was. It is not known with certainty at what time Pall Mall went out of fashion, but it was probably in the first half of the eighteenth century. The mallet and ball shown in fig. 105 were found in an old house in Pall Mall in 1854, and were presented to the Museum by Mr. Vulliamy.

GEMELLIONS. *See* p. 131.

GEMS (Engraved).

The art of gem-engraving, which was almost lost in the West between the fall of Rome and the reign of Charlemagne, was to a certain extent revived under that monarch and his immediate successors, only to be forgotten again until the approach of the Renaissance in Italy. More than one Carlovingian king had his signet engraved in intaglio; and of these seals several impressions remain, though only one original matrix has been preserved, that of Lothair II (A. D. 855–869), now set in the surface of an early

mediaeval cross in the treasury of the Cathedral of Aix-la-Chapelle. Crystal was the favourite stone of the Carlovingian engraver, who carved in pieces of large size sacred scenes and subjects, principally the Crucifixion. The British Museum is fortunate in possessing

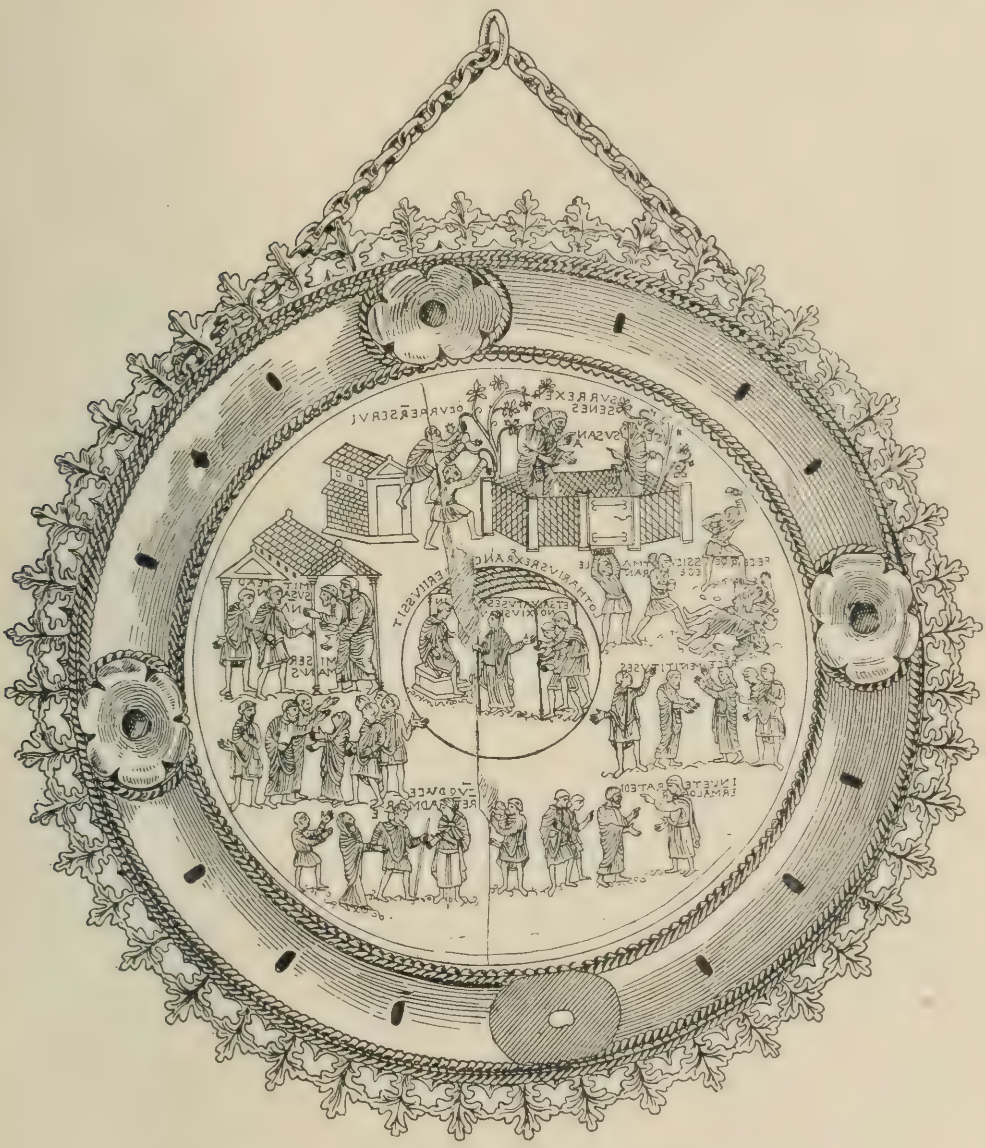


FIG. 106.—The Crystal of Lothair, ninth century.

three such engraved crystals, two of which are Crucifixions of inferior workmanship, while the third, that known as the Crystal of Lothair, is by far the finest work which has come down to us from that age. The inscription upon this remarkable object, which is a great lenticular disc now set in a mount of the fifteenth cen-

tury (Table-Case F and fig. 106), states that it was made to the order of Lothair, King of the Franks, probably Lothair II; the subjects upon it, which are executed with great vigour and skill, represent scenes from the story of Susanna. The history of this crystal is so extraordinary that it must be briefly recounted here, for hardly any ancient jewel in existence has passed through such strange vicissitudes. In the first half of the tenth century, as we learn from the Chronicle of the Abbey of Waulsort (or Vasor, on the Meuse near Dinant), it belonged to the wife of Eilbert, Count of Florennes, in the present province of Namur. This Count, who was of a warlike disposition, gave it to a canon of Rheims as a pledge for a fine horse which had taken his fancy at a fair. As soon as he had obtained the money to redeem the pledge, Eilbert went to the canon and asked for the jewel; but to his surprise was met with a disclaimer of all knowledge that any such object existed. The Count, thwarted for the moment, went back to his home, summoned his retainers, and returned with a large force to Rheims, whereupon the canon took refuge in the great church, and concealed himself so cleverly as to elude all search. Eilbert then ordered the building to be surrounded and set on fire, which was immediately done, with the result that the delinquent, half-suffocated with smoke, rushed out into the very arms of the Count's men and the crystal was found hidden on his person. The Count retained possession of it for many years, but when he became old he repented of the sacrilege which he had committed in burning the church, and presented it to a monastery which he had recently founded near his castle of Florennes. This was the Abbey of Waulsort, and there the jewel remained undisturbed for eight hundred years. But at the time of the French Revolution the monks were dispersed, and the Crystal of Lothair disappeared for more than a generation. At last, at some time near the middle of the nineteenth century, it was offered for sale by a Belgian dealer in antiquities, who said that it had been fished up out of the Meuse. This story was probably true, as at the time of the Revolution it may either have been thrown into the river by some one unaware of its value, or purposely dropped into the water by a monk who hoped by this means to preserve it from mischance and recover it on the return of happier times. It was purchased by a French collector for twelve francs and ultimately came into the possession of the English collector, Mr. Bernal, at whose sale at Christie's in 1855 it was acquired by the British Museum. The jewel was probably cracked during the period of its disappearance.

The number of antique engraved gems with pagan subjects used to ornament the surfaces of reliquaries and other objects of Church furniture show that the glyptic art was little if at all practised in the earlier Middle Ages, though Theophilus (see p. 80) alludes to gem-cutting in Italy. The hard stones were probably

seldom cut before the fourteenth century, though Stephen Langton, Archbishop of Canterbury (1206–1228), is said to have sealed with an intaglio bearing a sacred subject, and a cameo in the Museum collection representing Our Lord in the Garden (Gold Ornament Room, Case **W**) is assigned to the thirteenth century, and a few other early examples are in existence. In the inventory of the Duke of Anjou (1360–1368) a single cameo with a Christian design is mentioned, while in that of Charles V (1379) a few such gems occur. A sapphire intaglio with a portrait considered to represent the brother of that king, the Duc de Berri (d. 1416), is in the Franks Bequest. A Florentine history records that one Benedetto Peruzzi of Florence was a skilled engraver of gems, and imitated



Fig. 107.—Cameo: René of Anjou.



Fig. 108.—Cameo, fifteenth century.

the seal of Carlo di Durazzo in 1379. But in view of the facts mentioned above, it may be assumed that work of this kind had been executed for some years before this date, and some of the early gems used as private seals (cf. fig. 150) may be of Italian origin. Vasari says that gem-engraving flourished under Martin V (1417–1431) and Paul II (1464–1471), and afterwards continued to improve. The inventory of the Duc de Berri mentions a cameo with the owner's effigy, and the sapphire engraved with a royal figure, formerly described as belonging to St. Louis, is considered to have been cut for Louis XII (1498–1515). An interesting cameo in the collection is the portrait of René of Anjou (d. 1480) (Gold Ornament Room, Case **W** and fig. 107). Cameos cut in shell (figs. 23 and 24) were made in Italy and France especially in the fifteenth and sixteenth centuries. The larger reliefs in mother-of-pearl, chiefly made in Germany in the sixteenth century, are a later development of such work in shell (examples in Table-Case **F**, fig. 109).

Towards the close of the fifteenth century the revival of the glyptic art was complete: princes had begun to form collections of antique gems and to encourage contemporary artists to work in the same manner. The most famous collectors and patrons were Pope Paul II, Lorenzo the Magnificent (1462–1492), for whom Giovanni delle Corniole (John 'of the carnelians') worked, and Piero de' Medici, his son. The gems of his collection were marked so that they can still be identified, and one of them, a very beautiful and early cameo of large size (fig. 48), is exhibited in Table-Case **W** in the Gold Ornament Room.

The gem-engravers of the Renaissance derived their subjects in

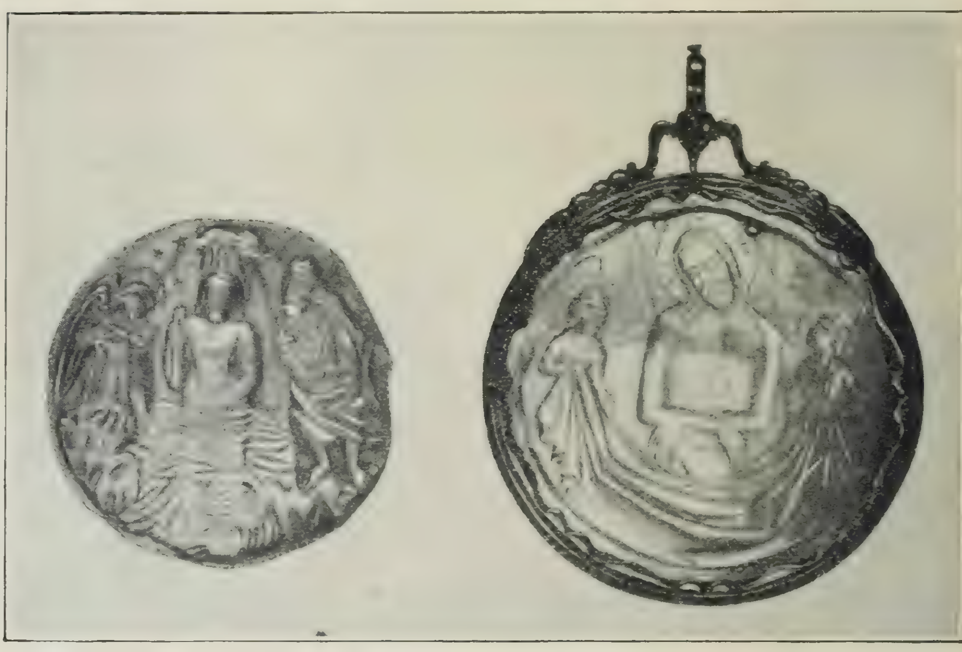


Fig. 109.—Reliefs in pearl-shell, sixteenth century.

great part from contemporary paintings and engravings, though in part they were inspired by the antique. But in the latter case they were never mere copyists, and infused into their work a naïve and original spirit which as a rule renders their gems readily distinguishable from those of classical antiquity. They further differed from their classical predecessors in frequently introducing groups of numerous figures, whereas the classical artist severely restricted the number of persons represented. Among the better-known engravers of the period are, in addition to Giovanni delle Corniole already mentioned, Michelino, working for Leo X, Giovanni Bernardi di Castel-Bolognese (d. 1555), for Clement VII, Valerio Belli (Il Vicentino), for Clement VII

and Paul III, and Matteo del Nassaro (d. 1546), who was in the service of Francis I. The last-named formed a French school to which Olivier Codoré and others belonged. In the seventeenth century the lavish use of engraved gems for personal adornment diminished. The engraver's art declined, and in comparison with those of the Renaissance the gems of this century are feeble and negligent in execution. But from the middle of the eighteenth

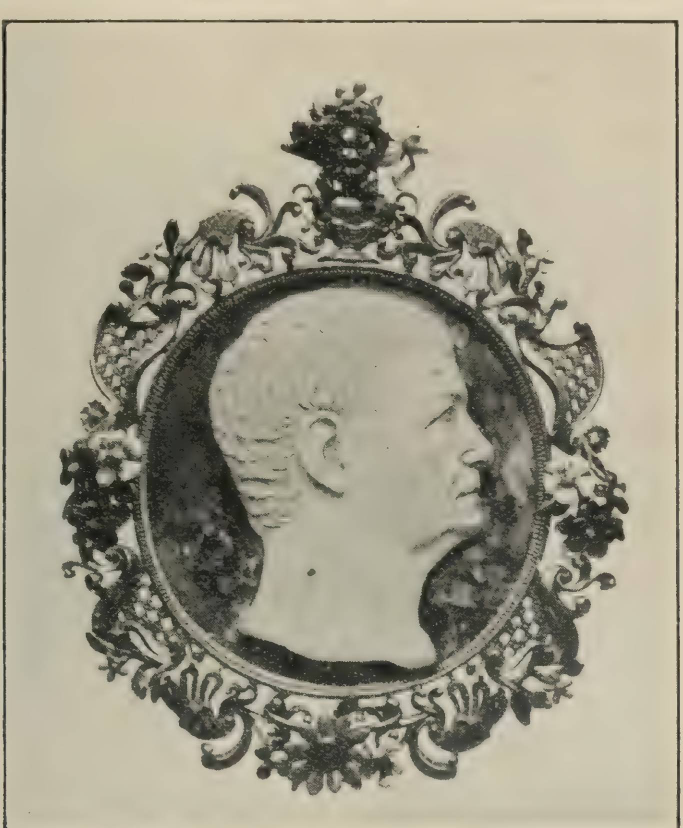


Fig. 110.—Cameo by Alessandro Cesati (Il Grechetto), 1538-1561.

century there was a great revival, due to an increased appreciation of Greek and Roman antiquities and to such events as the discovery of Herculaneum; and this improved condition of affairs lasted well into the nineteenth century, not coming to an end until about 1840, when the art of engraving gems almost died out. The great characteristic of this period is its extremely close imitation of the antique. So accurate is this imitation, and so well is the spirit of the model often rendered in the best work, that gems of eighteenth-century origin have been mistaken for works of the Augustan age, the style of which they reproduce. The models of which the artists now availed themselves were statues and busts as well as ancient gems; and the work was often

signed with the real or supposed name of an antique engraver. Sometimes the imitator signed with his own name in Greek characters: thus the members of the Pichler family sign their gems ΠΙΧΛΕΡ. Signatures were occasionally added to genuine antique gems to enhance their value. Among the names of gem-engravers who achieved distinction during this later period were the Italians Amostrini (fig. 46), Girometti, Sirletti, Santarelli, and Pistrucci, the last living in England and also working as a medallist: the Frenchmen Jacques Guay (d. 1787), the brothers Simon (d. 1821 and 1834), and Louis Siriés; the Tyrolese Anton Pichler (d. 1779) and his sons Johann (d. 1791) and Luigi (d. 1854); and the English artists E. Burch, R.A. (d. 1814) (fig. 46), and N. Marchant (d. 1816) his pupil. The Collection contains gems by most of these engravers (Gold Ornament Room, Cases O and U). A large collection of glass pastes and sulphur casts from ancient gems in various collections of Europe was formed by the Prussian Baron Stosch; these were ultimately purchased by the Scottish modeller James Tassie (d. 1799) to be used for his own glass reproductions, which were numbered by thousands. Examples of his work are to be seen in many museums, and series (part of a larger number) are exhibited in the Glass Room, Table-Case, and in the window of the Room of Gold Ornaments and Gems.

GESSO.

Gesso is a composition of whiting mixed with glue to give it consistency. The modelling of gesso in relief may have been introduced into Italy about the thirteenth century, as Theophilus does not mention it, but Vasari in his life of Margaritone records that this painter formed diadems and other ornaments in relief upon his pictures. In the succeeding period moulded gesso painted and coloured was freely applied to wood, and was especially popular in the fourteenth and fifteenth centuries. The Italian caskets in Wall-Case 44 (plate IX and fig. 111) are pleasing examples of this kind of work.

GIMMEL RINGS. *See* p. 175.

GLASS.

Apart from the stained glass of windows, the amount of mediaeval glass which has come down to us is very small, far smaller in fact than that which we possess from the remains of more ancient civilizations. This is because in Roman and Anglo-Saxon times, to say nothing of earlier periods, glass vessels were constantly deposited in tombs, from which almost all the exist-



Plate IX. Italian Casket, coated with Gesso, early Fifteenth Century.

[See p. 144.

ing specimens are derived, whereas in the Middle Ages glass was not buried with the dead. It is not to be supposed that the mediaeval glass-maker did not make flasks and bottles for domestic use; but, as modes of transport were primitive, leather, wood, metal, and earthenware, which would stand rougher usage, were probably the materials most in favour, and the proportion of glass utensils must have been comparatively small. Diminutive bottles for perfumes or essences were no



Fig. 111.—Casket with gesso ornament, North Italian, sixteenth century.

doubt numerous, and small phials have on several occasions been found near the foundations of the chancel walls of churches under conditions which suggest a mediaeval date: examples of such small vessels are shown in the Glass Room, Wall-Case 63. In the neighbouring case in the same room are exhibited specimens of the earliest English glass wine-bottles known: these are in no case earlier than the seventeenth century.

The glass industry of Europe only attained large proportions from the fifteenth century through the influence of Venice, which in this respect as in so many others was the pupil of the East.

The so-called *verre églomisé* needs a few words of explanation. In its simplest form it consisted of a panel of glass or crystal, to the back of which a foil of gold was applied. On this a design was engraved with a fine point, the portions of the foil not required being entirely removed. A second panel of glass was then fused on the back, as a protection, exactly in the manner adopted

in the case of the gilded glass of the Catacombs and its prototypes (see *Guide to the Early Christian and Byzantine Antiquities*, p. 59). This kind of work is said by Theophilus to have been continued by the Byzantines, and we find it in the West in the thirteenth and fourteenth centuries, when numerous diptychs and religious pictures were made in Italy (chiefly at Venice), France, and possibly also in England, a famous example being the retable now in the Jerusalem Chamber at Westminster. Cennino Cennini, an Italian writing in the fourteenth century, also describes this work, which is illustrated by Italian and German examples in the Glass Room, Wall-Case 50. Colour now began to be frequently used, and the protecting glass at the back was often omitted. As time went on the gold was more and more displaced by colour, and the engraving which had formed so important a part of the primitive work was almost entirely superseded by painting. Painting under glass remained popular down to the eighteenth century, and was practised in many parts of Western Europe, being employed at the Renaissance chiefly for small pendants, but afterwards for regular pictures of much larger size. The word *églomisé*, which it would be well to abandon, is simply derived from the name of a certain M. Glomy, who lived in Paris in the eighteenth century, and was well known as a framer of glass pictures of the kind above described.

GLOVES. *See* p. 93.

GOA STONES.

These were globular masses composed of various drugs (calomel, musk, &c.), small portions of which were scraped off and taken in water as a specific against abdominal complaints; they owe their name to the fact that they are supposed to have been made by the Jesuit fathers at Goa, in Western India. They were often gilded, and enclosed in cases of silver (examples in Table-Case **A**).

GOLD CUP, ROYAL. *See* p. 236.

GRAVOUÈRES (broches, brochettes).

These were instruments like large styli, and commonly of ivory, used for parting the hair. They were thick at the upper end, where they usually terminated in sculptured figures. A number of gravouères of the fourteenth and fifteenth centuries are preserved in French and Italian museums, and there is a good example in the Victoria and Albert Museum at South Kensington.

GRYPHON'S CLAWS.

The belief in the existence of the fabulous gryphon of more ancient times was general in the Middle Ages and even after the Renaissance. The gryphon of the Greeks was a monster with the head of an eagle and the body of a lion, and so it still appears in the bestiaries, and numerous textiles or sculptures of the Romanesque period. Popular fancy, however, imagined that it laid eggs, and the eggs of the ostrich are freely ascribed to the gryphon in mediaeval documents. The horns of all kinds of animals, serving as drinking-cups or reliquaries, were described as gryphon's claws; the ibex horn in Wall-Case 45 (fig. 112), as the inscription on its sixteenth-century silver mount records, was formerly

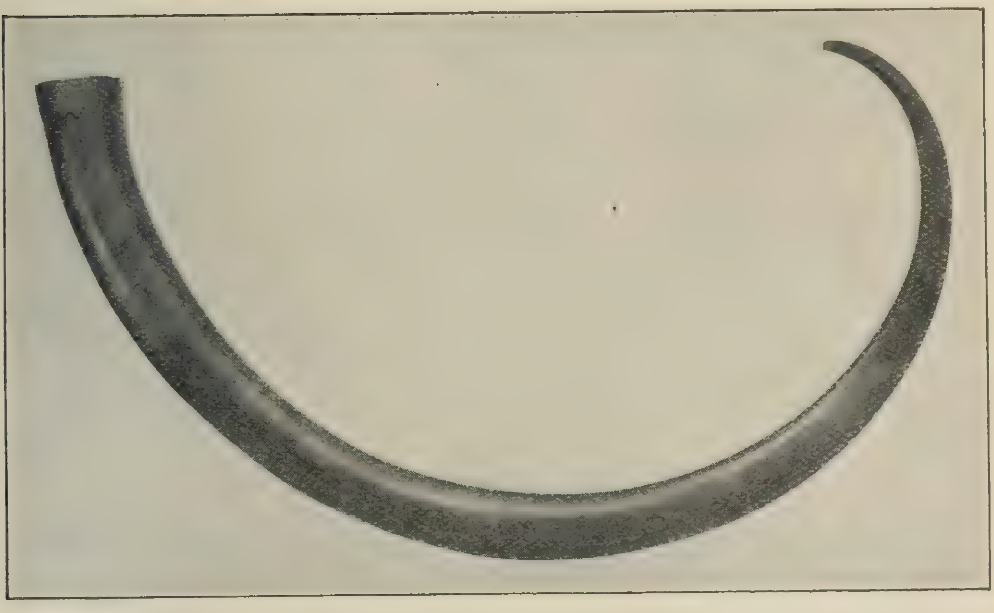


Fig. 112.—Ibex horn, formerly described as a gryphon's claw.

(with another) in the Shrine of St. Cuthbert at Durham, where three 'griffins' eggs' were also preserved. The inventory made by Richard de Segbrok, Keeper of the Shrine in 1383, mentions both the claws and the eggs.

GYPCIÈRES. *See* p. 242.

HALL MARKS. *See* p. 234.

HANAPS. *See* p. 99.

HAND-WARMERS (chaufferettes).

These were openwork spheres of metal, having in the interior an arrangement of rings suspended in such a manner on gimbals that the cup containing the fire (probably of charcoal) or red-hot ball of metal should remain upright in any position. They were especially used by the priests during the celebration of the mass, for in winter mornings, in buildings never heated, their fingers were apt to be numbed by the cold (example in Wall-Case 18 : oriental examples in Wall-Case 10, &c.).

HAUBERKS. *See* p. 59.

HELMS. *See* p. 61.

HISTORICAL RELICS.

The following are the more important among the objects formerly belonging to historical personages.

In the Mediaeval Room.

Table-Case **A.**

Quadrant, with the badge of Richard II ; quadrant designed by Sir John Cheke for Edward VI ; astrolabe of Henry VIII ; astrolabe of Prince Henry, eldest son of James I. Silver-gilt casket with the arms of Margaret, queen of Edward I, and Isabella, the betrothed of Prince Edward, afterwards Edward II ; probably a gift of Margaret to Isabella.

Table-Case **D.**

Silver seal of Joanna, daughter of Henry II ; seals of the Duke of Bedford, Regent of France (d. 1435), and of Sir Walter Raleigh.

Table-Case **F.**

Crystal medallion engraved in intaglio, made for Lothair II (864–869) (see p. 139).

In the Gold Ornament Room.

Over Case **W.** The Royal Gold Cup (see p. 236). In Case **W.** On the right: gold ring of Ethelwulf, King of Wessex (d. 858). On the left: gold bulla of Edmund, King of Sicily, second son of Henry III ; gold vervel (see p. 135) belonging to Henry IV. Prayer Book of Queen Elizabeth, in an enamelled gold cover. Signet-ring of Mary Queen of Scots. Gold five-broad piece of Charles I, given by the King to Bishop Juxon on the scaffold,

and known as the Juxon medal. Gold watch of Oliver Cromwell. Watch of James II. Snuff-box given by Napoleon I to the Hon. Mrs. Damer.

HONESTONE CARVINGS. *See* p. 73.

HORN-BOOKS.

A horn-book is a leaf or page on which are usually printed the alphabet, the figures 1–9, and the Lord's Prayer, set in a handled frame, commonly of wood, but sometimes of ivory, silver, and other metal, and protected by a sheet of transparent horn. They were used for teaching children their letters; and the horn covering was a practical device for keeping the page clean. Though pages with letters written upon them must have been used at an earlier time for the same purpose, the first record of an actual horn-book dates from about 1450. But these simple aids to learning do not appear to have been used in great numbers until the latter part of the sixteenth century, when references in contemporary literature become frequent. The earliest existing horn-books are printed in black-letter and are extremely rare; but even those of the two following centuries are now most difficult to find, probably less than two hundred out of the many thousands once made having escaped destruction. They were finally displaced by spelling-books in the earlier part of the nineteenth century. For about the last hundred years of their existence horn-books were imitated in gingerbread made in wooden moulds.

There are several horn-books in the Department of Printed Books, and in the Victoria and Albert Museum at South Kensington.

HORNS.

Horns, usually of a single curve, were made of various materials, especially of bronze, ivory (called *oliphants*, see p. 153), the horns of animals, and wood. They were worn suspended from one shoulder by a strap. Such horns were used to summon the burgesses in many English boroughs, and ancient examples are preserved among the corporation plate and insignia of various cities. The long straight trumpet with bell mouth was also used, and is frequently seen represented in illuminated miniatures representing the Apocalypse.

(For drinking-horns see also under **Cups.**)

HORSE-SHOES.

It is difficult to obtain accurate information as to mediaeval horse-shoes: probably, as Prof. W. Ridgeway suggests in his *Origin and influence of the Thoroughbred Horse*, most horses went

unshod, there being no hard roads in the country by which their hoofs could be damaged. Good evidence points to the use of iron horse-shoes in the Roman period, and examples have been found in France under conditions which make a Roman date almost certain. The small shoes with wavy exterior edges, which have frequently been excavated, are probably of this age, and the shoes found at Silchester must date from the Roman occupation. No doubt the forging of iron horse-shoes, when once introduced, went on continuously, but when roads ceased to be paved with hard flags in the Roman style, it would no longer be necessary to shoe



FIG. 113.—Incense-boat, fifteenth century.

beasts of burden to the same extent. The earliest form of shoe was doubtless a kind of slipper first perhaps of hemp, like those worn by Roman oxen in the first century B.C., afterwards of leather with a metal ring at the bottom. The now familiar shape may have been reached by cutting away the unnecessary part of the ring over the heel. It is uncertain where iron shoes fixed with nails were first used, whether South of the Alps, or among the iron-working Celts north of that chain. Perhaps they were not generally employed until about the fourth century of our era.

For the Oakham horse-shoes, *see* p. 33.

INCENSE-BOATS (navettes).

The *Incense-boat*, as known from existing specimens, derived its form from the ship or boat, which was one of the earliest symbols

of the Church, though in most cases the resemblance is at best a distant one. No certain examples of vessels for containing incense are known in art before the eleventh century, when a miniature shows an angel carrying a censer and a small vessel in the shape of a bowl or basin. Possibly the earliest form may have been cylindrical, as the pagan Romans used cylindrical pyxes (*acerrae*) for their incense. At the end of the twelfth century, sculptures show angels carrying navettes of the boat-shaped type, but without covers. In the sixteenth century the vessel sometimes assumed a far closer resemblance to a ship, thus approximating, though on a small scale, to the *nefs* or great vessels which were placed before great personages at the banquet to contain their cups and table utensils.

INCENSE BURNERS, ORIENTAL. *See* pp. 6 and 223.

INCENSE-SPOONS. *See* p. 253.

INTAGLIO. *See* pp. 27, 28.

IVORY CARVINGS.

Ivory has been a favourite material for sculpture in all ages; and whether obtained from the tusk of the mammoth or elephant or from the teeth of the walrus or the sperm whale, has tempted the carver by its durability and by that closeness of grain which renders it eminently suitable for work of fine detail. Long before the beginning of history, the inhabitants of the French caves were able to carve ivory with figures of animals (*Guide to the Stone Age*, pp. 44, 49), and every great civilization in its turn, ancient Egyptian, Assyrian, Mycenean, Greek, Etruscan, and Roman, has left carvings in this material, examples of which are to be seen in the various departments of the Museum. We are here concerned only with ivories later than the Christian Era, and of these the examples belonging to the Early Christian and Byzantine Periods have already received some mention in the *Guide to the Early Christian and Byzantine Antiquities.*

The principal objects made of carved ivory at the beginning of the period were caskets, and writing-tablets opening like books, coated with wax on the inner sides to receive inscriptions written with a stylus. The former had been chiefly employed in pagan times for ladies' jewels, but also to contain the grains of incense for the altar; these were now made to serve as pyxes (see p. 244) or as reliquaries. From the writing-tablets were derived larger and more ornate tablets for use on special occasions, of which the *consular diptychs* were the most remarkable. These diptychs were



FIG. 114.—Ivory panel, tenth century.

sent by consuls to important personages as a formal notification of their accession to office, much as rings were distributed by sergeants-at-law in our own country (see p. 179), and the usage was continued until the abolition of the consulship in A.D. 541. Many consular diptychs were afterwards preserved in churches and inscribed with lists of bishops, benefactors, saints, and martyrs, or prayers to be recited during services. Sometimes, especially in the case of the large composite type each leaf of which was formed of five separate pieces, they were adapted for use as covers for books of the Gospels. In the latest development of the diptych the old practice was reversed and the interior surfaces were carved while the exterior surfaces were left plain. Diptychs of this kind were made simply as aids to devotion, and were the commonest form produced in the Middle Ages, though writing-tablets lined with wax continued to be used until paper became generally accessible (examples in Table-Case **F**, and see p. 270). But in addition to caskets, tablets, and their derivatives, Christian artists introduced forms hitherto unused. The most conspicuous of these was the pastoral staff, which, either in the form of the crozier or the Tau-cross, was, from the eleventh century onward, often made of ivory, while in the earlier centuries of the Middle Ages the elaborately-carved combs used for combing the hair of high ecclesiastics before celebrating

the mass were usually made of the same material. About the same period, small ivory *situlae*, or buckets for holding holy water, were also made. Horns of ivory, known as *oliphants*, were produced in considerable numbers between the tenth and twelfth centuries, the character of their ornamentation, which generally consists of animals and monsters within scrolls pointing in many cases to an oriental origin. Some were converted into reliquaries; others were used as tenure-horns, a most interesting example being the horn of Ulphus, preserved in York Cathedral. The handles of *flabella*, or fans, originally intended to keep away flies, but later used ceremonially, were also carved

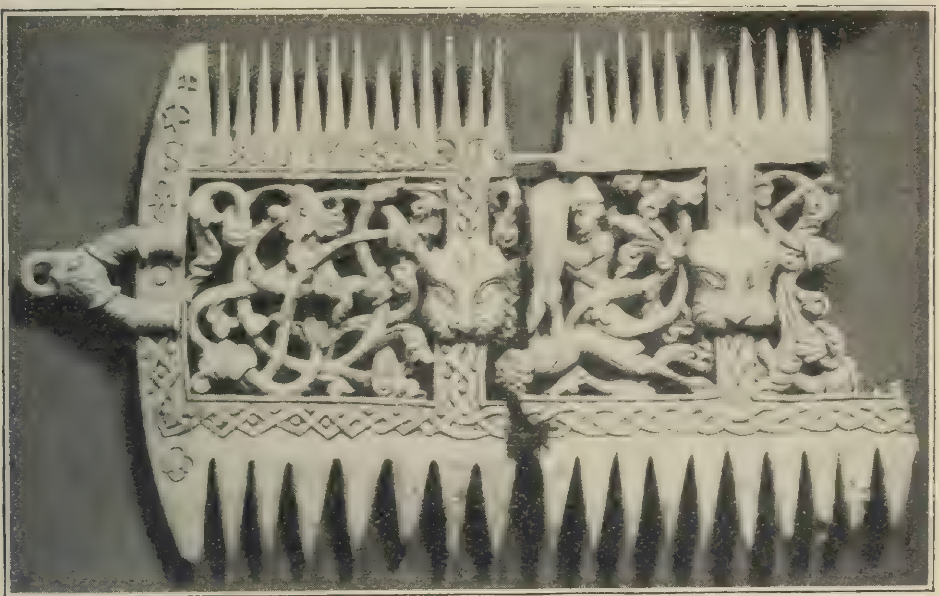


FIG. 115.—Ivory comb, eleventh century.

of ivory: part of such a handle is to be seen in Table-Case **F**. Crucifixes of ivory were made in the Middle Ages, but very few have survived to our time, the majority of ivory figures of Christ upon the cross dating from the sixteenth century or later. For secular purposes, the Middle Ages used ivory occasionally for the matrices of seals (see p. 190), and constantly for chessmen, draughtsmen, the writing-tablets already mentioned, the cases of circular portable mirrors, and for jewel caskets: examples of all these objects are shown in the same Table-Cases **F** and **L**. The ivory cups and flagons with figures in high relief were made in the seventeenth and eighteenth centuries; in the latter century ivory was employed for a host of small ornamental objects such as snuff-boxes and graters.

In the Early Christian Period carving in ivory was practised in

all the wealthier provinces of the Roman and Byzantine Empires. In Italy, the principal centres from the fourth to the sixth century were Rome, Milan, and Ravenna, but Ravenna was especially dependent upon the art of the Christian East, where, in Egypt, Syria, Asia Minor, and Constantinople, large numbers of ivories with religious subjects were produced. Many of these found their way into Western Europe during the dark period of the seventh and eighth centuries, when the Teutonic invasions submerged the old Roman civilization, and indigenous art meant little more than simple decorative design. They were imported by merchants and pilgrims, like the more numerous illuminated manuscripts, and were preserved principally in monasteries. In Merovingian and early Anglo-Saxon times, the effect which they produced upon local art was comparatively small; but the Carlovingian Renaissance revealed their importance, and they were then imitated by the monastic artists working in the great abbeys of the Frankish Empire. The illuminated manuscripts of the Irish and Anglo-Saxons found a place by the side of these more ancient models, for the monasteries of the British Isles had a great reputation for learning both in art and letters, and were in advance of those upon the Continent. About A.D. 800, when in Italy, as a result of Lombard rule, sculpture had sunk to the lowest level, and in the Byzantine Empire development was checked by the iconoclastic dispute, ivory carving revived with the other arts in the North of France and the adjacent parts of Europe, which formed the nucleus of Charlemagne's dominion; and as monumental sculpture was at the time practically non-existent, this diminutive work possesses an exceptional importance for the history of art. The style of the Carlovingian ivories betrays the sources from which their inspiration was derived; and in the scenes chosen, the grouping of the figures, and the treatment of features or drapery we can trace the influences of Early Christian, Byzantine, and British originals. The Carlovingian Revival lasted more than a hundred years, and during its flourishing period the arts were fostered in the great monasteries of Rheims, Metz, Corbie, Echternach, Reichenau, St. Gall, and others. But in spite of differences of style which in some cases allow us to assign groups of ivories to certain centres, and especially a definite group to Metz, there is a certain general likeness which gives to all these works something of a cosmopolitan character. This may partly be explained by the manner in which the monastic artist moved from place to place at the bidding of his superiors.

In the tenth century, while Italy still remained in darkness, and France, distracted by internal troubles, only produced degenerate work in the Carlovingian manner, there was a new revival in Germany, partly due to the stable government of the Saxon emperors, partly to more direct relations with Constantinople.

At the close of the tenth century, when the Ottos occupied the Imperial throne in the West, the products of the second period of Byzantine art, which began after the close of the iconoclastic dispute, now found their way to the North-West, and their influence is very perceptible in German work. But imitation did not result in slavish copies, and the various schools of German ivory carvers between the tenth and twelfth centuries are characterized by an individual treatment, creating what may almost be described as a national, if ungraceful, style. Byzantine versions of sacred subjects were adopted; but the work was marked with an obviously Western stamp. The principal centres of the art were in the old towns of the Rhine; but one group of ivories may perhaps point to the existence of a Saxon school, for the panel in the Trivulzi Collection at Milan, representing the Emperor Otto I and his family at the feet of Christ, is executed in a style which became characteristic, and is represented by a panel in the Museum Collection (Wall-Case 36) representing the raising of the widow of Nain's son. But by the second half of the twelfth century the art of carving in ivory seems to have fallen into abeyance, the latest examples being the panels mounted in the fine enamelled reliquaries made at this period upon the Rhine. But they were often of no particular merit, and unworthy of the fine metal-work with which they were associated.

It has been mentioned that Anglo-Saxon and Irish art, especially that of the illuminated manuscripts, exerted a considerable influence in the Frankish Empire. Long after the time of the famous early missionaries like Saint Columba, numerous monks from our islands continued to live in Continental monasteries, some of which had actually been founded by the missionaries or by their disciples. Relations between such monasteries and Great Britain were maintained after the time of Charlemagne, and the connexion was especially close in the case of St. Gall. In the mother country itself ivory carvings were produced in the pre-Norman period, marked by as strong an individuality as any made upon the Continent. The remarkable Franks Casket in the Anglo-Saxon Room, though of bone not ivory, is an example of Northumbrian art in the eighth century. In the same room may be seen a later ivory seal of Godwin the Thane, which has on a projection from the rim a group in high relief representing the Trinity, of very considerable merit. In the Victoria and Albert Museum there is a large panel representing the Adoration of the Magi in the most characteristic Saxon manner, and the smaller panel in the Louvre is a work of the same school. There is less unanimity of opinion with regard to the pair of panels in the Brussels Museum, which were formerly in the Church of Genoels Elderen.

In the second half of the tenth and the early part of the

eleventh centuries, the Arabs attained great skill in ivory carving, especially in Spain, where they produced inscribed caskets ornamented with enamels and acanthus designs in high relief. Most of these are preserved in Spain and France, where they have usually served as reliquaries, but there is an exceedingly fine example in the Victoria and Albert Museum. The *oliphants* (see above) which came into Europe about the same time are considered to be partly Oriental, partly Byzantine, and partly early Western copies of these two classes. It was at this time, between the ninth and twelfth centuries, that Byzantine ivories reached their highest perfection. The ninth century was still affected by the dislocation of religious art caused by iconoclasm, and much of its work was of a secular character, consisting of caskets with classical subjects, or subjects in a pseudo-classical style, probably copied from antique silver plate and from manuscripts (two panels in Wall-Cases 35 and 36). But from the close of the century religious subjects again predominated, and a large number of diptychs and triptychs, or simple leaves from these, are to be seen in European collections, many having been carried away from Constantinople after the sack of the city by the Crusaders in A.D. 1204. The best Byzantine work dates from the period of two hundred and fifty years preceding this event, and two fine examples, a reliquary at Cortona, and the central panel from a triptych at Paris, are dated by the names of the Emperors mentioned in their inscriptions, the first referring to Nicephorus Phocas (A.D. 963–969), the second to Romanus IV and his wife Eudocia (A.D. 1068–1071). After the Latin interregnum, there was a certain revival of the arts under the Palaeologi, and some hold that even in the last century of the Empire meritorious imitations of the earlier work were manufactured. The carvings of the best period (tenth and eleventh centuries) are marked by a singular refinement of execution and by the most delicate finish. The treatment of the human figure is by no means so stiff or so stereotyped as it was once customary to suppose; the extremities are often well rendered, and the draperies fall into natural and simple folds. It is clear that Hellenistic and Graeco-Roman traditions continued to influence the artists; and though the conventions of religious art still imposed a certain uniformity, the attitudes are just and the faces often expressive. In the delicacy of its modelling and the almost classic excellence of its drapery a really fine Byzantine ivory carving can be compared with nothing but the best work of the French carvers in the thirteenth century. Elongated figures and stiff, awkward gestures belong to the later part of the period, or to the inferior workshops, for objects in such great demand as devotional ivories cannot all have been executed by artists of repute. Where decorative designs are introduced, as sometimes

on the backs, the influence of the East, notably of Persia, is apparent. Architecture plays a less prominent part than in the ivories made in the Christian East in the fifth and sixth centuries; single figures of saints are not so frequent between columns surmounted by arched niches, though canopies, often in openwork, are placed over whole groups; the scale of the figures and of the panels themselves is generally smaller. The large panels used for diptychs and book-covers have disappeared, and are replaced for



Fig. 116.—Ivory draughtsmen, early thirteenth century.

the most part by diptychs and triptychs made for purely devotional purposes, with subjects almost entirely derived from the lives of Our Lord and the Virgin, or figures and busts of the saints. Old Testament subjects seem to have survived chiefly upon the caskets made about the iconoclastic period: two panels from such a casket, with scenes from the story of Joseph, are exhibited in the Table-Case F. Like the artists of the Western Middle Ages (see below) the Byzantine carvers were in the habit of colouring and gilding their work, though not, perhaps, to the same extent. Unfortunately, this second period of Byzantine art is not well illustrated in the Museum Collection by good typical examples.

In the Romanesque period (roughly, the eleventh and twelfth centuries), which includes the Norman period in England, ivories are no longer so important for the history of art as they had been during the preceding two centuries. At that time monumental sculpture was almost unknown, and the diminutive carvings teach us almost all that is to be learned as to the condition of plastic art in Europe. But with the eleventh century the churches and cathedrals began to receive a rich decoration of sculptured reliefs. Sculptors of ability now devoted themselves to work on the larger scale, and as the number of surviving ivory carvings of this period is comparatively small, it is to be presumed that the increased opportunities offered in this new field caused a certain neglect of the minor art. As the period advanced, the ivory carvers fell more and more into a dependent position, for the monastery workshops in which they had learned their craft were training sculptors to adorn the tympana and façades of churches; the great popularity now enjoyed by artistic metal-work, especially that decorated with enamels at Limoges, on the Meuse, and on the Rhine, doubtless tended to the same result. Transitional between the old Carlovingian tradition and the Romanesque style is the large panel exhibited in the Table-Case **F** (fig. 114), with subjects from the life of Christ, closely related to the famous diptych of St. Nicasius in the Cathedral of Tournai and a casket in the same style in the Berlin Museum. The vine-scrolls and the treatment of the subject are reminiscent of Carlovingian art, while the numerous inscriptions are characteristic of the work of the Meuse and Rhine, where many of the Romanesque ivories were executed. Some of these ivories are also affected by earlier Western traditions; others are strongly influenced by Byzantine models. But by the end of the eleventh century a distinct tendency to originality of treatment begins to be manifested, and where the subject in general conforms to Byzantine requirements, details of costume or physiognomy attest the reawakening of an original Western art. The ivories used to heighten the effect of Rhenish enamelled reliquaries of the late twelfth century are of inferior merit, and must have been almost commercial products (examples inserted in the portable altar, Wall-Case 30 and plate XIV), while the panels from caskets with figures in very high relief (Wall-Case 36) show little feeling for beauty. Some Romanesque ivories assigned to France, though less ugly, manifest a tendency to over-elaboration and excess of ornament. If the fine Tau-cross (plate X) found at Alcester was made in England before the Conquest, it attests a remarkable artistic sense in our own country, the existence of which is confirmed by the fine miniatures of the Winchester school of illuminators. Where ornamental motives are employed to cover the whole surface, we find a free use of the intricate scroll designs, popular in greater sculpture, in the convo-



PLATE X. ENGLISH TAU-CROSS. ELEVENTH CENTURY.

[See p. 158.

lutions of which men and animals are contained. Examples of this are to be seen in the comb (fig. 115) and oblong box in Table-Case **F**, probably made in England. Animals and monsters, alone or confronted, and clearly derived from oriental art, recall the ornamentation of the oliphants; and the draughtsmen (Table-Case **L** and fig. 116) are carved with figure subjects, historical, biblical, or mythological, and monstrous symbolical figures. Scandinavia during this period was prolific in chessmen; and the fine series from Lewis in the same Table-Case affords an excellent illustration of this northern work.

With the rise of Gothic architecture in the thirteenth century the influence of France became predominant, and through the general imitation of the French style there is a tendency to uniformity in the ivories wherever produced. But the most capable artists continued to devote themselves to the greater branch of sculpture, and ivory carving became an industrial art rarely able to command the services of the highest talent. The work was organized on a commercial basis, and the workshops, the chief of which appear to have been in Paris, turned out these small sculptures in such quantities that an exceedingly large number of them are still in existence. Of the artists themselves we know practically nothing: they are completely merged in the corporate body of the *ymagiers tailleurs* of whom we read in mediaeval documents. A *Jean Lebraellier* was ivory carver to Charles V of France, but we do not know his work; a *Jehan Nicolle* has signed a pax in the Museum Collection (Wall-Case 42), but this is a relief of no merit and belonging to a poor period.

The style of ivory carvings follows that of monumental sculpture, but often at a distance; and there is a tendency to conservatism which is sometimes misleading; a frequent cause of this was, no doubt, the reluctance of the older workmen to relinquish the familiar fashions in which they had been trained. In the thirteenth century the spirit of Gothic sculpture is earnest and exalted; its types have an ideal and impersonal quality which in the finest work lends them a peculiar nobility, only surpassed by the best sculpture of the Greeks. Diminutive figures in ivory naturally lack the impressive grandeur of the statues which beautify the cathedrals, but some of them are finely inspired with the spirit of their age; the group in the Louvre representing the Coronation of the Virgin is an example of this great style manifested through the medium of ivory in the earlier Gothic period. But even before the thirteenth century came to an end there appears a tendency to mannerism, which, rapidly increasing during the next fifty years, changed the whole sentiment of religious art. In the faces, an air of worldly self-consciousness replaces the old naïve exaltation; an affected smile strays over the features, producing a merely quaint effect in spite of the

refinement and delicacy of the workmanship. In the draperies, simple folds are broken and multiplied, as if there was a greater preoccupation with costume and personal appearance. Something of this deterioration is apparent even in undoubtedly fine work such as the statuette of the Virgin and Child (Wall-Case 38 and plate I), and is only too conspicuous in the average diptychs of the fourteenth century (fig. 117). Nevertheless the ivory carvers still kept within the limits imposed upon them by their material, and maintained general types which still belong to an ideal art. But in the second half of the century there was a change in the

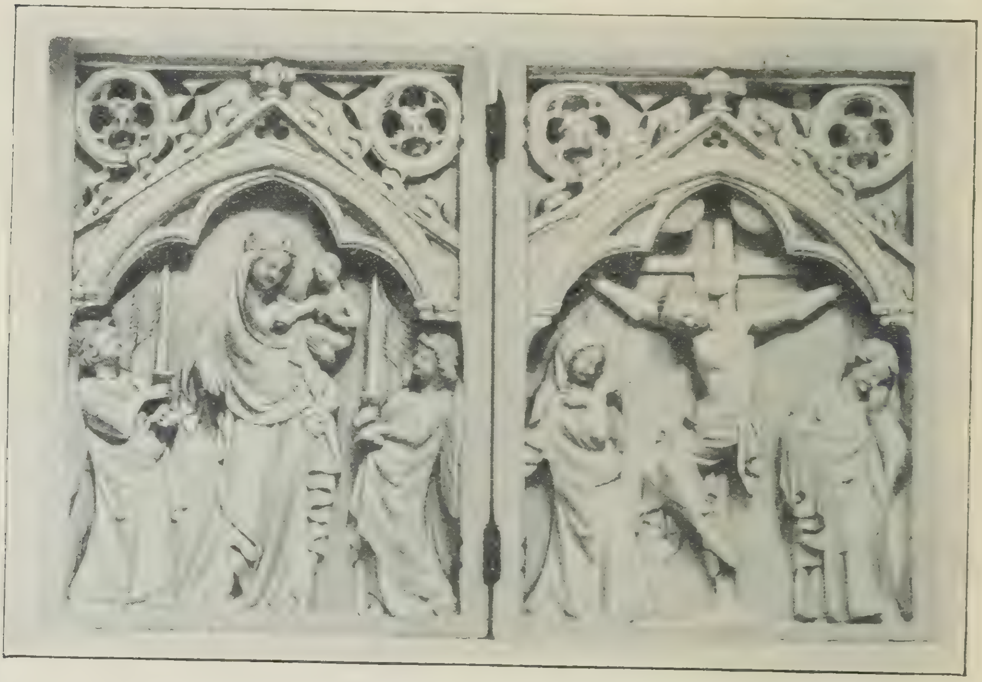


Fig. 117.—Ivory diptych, French, fourteenth century.

direction of realism, at first chiefly marked in the rendering of faces; and though for sacred persons the old drapery was retained, the costumes of secondary actors in religious scenes were consistently modified in accordance with contemporary fashions. At the close of the century the influence of the realistic art of Flanders, now predominant even in France, ensured the triumph of realism, and the ideal principles of early Mediaeval art were abandoned. We find heads which illustrate national characteristics, and it becomes easier to distinguish the work of the different countries of Europe.

Although during the period of the Gothic style the initiative was taken by France, while at its close Flemish influence was especially active, other countries were not altogether unproduc-

tive, and a certain number of ivories can be assigned to England, Italy, and Germany. We have seen that during an earlier period our countrymen were familiar with this branch of art, and it is therefore surprising to find so few ivories of the later Middle Ages which can with certainty be ascribed to their skill. Perhaps down to the middle of the fourteenth century French work was imported, or slavishly imitated; perhaps the canon for the figures of the ideal



FIG. 118.—Ivory triptych with arms of Bishop Grandison of Exeter, English, fourteenth century.

period was everywhere very much the same. At any rate it is only after this time that it seems possible to distinguish work which can be definitely claimed as English. In most cases it is by a peculiar style, minute and somewhat hard, by types of heads and faces vigorously and realistically treated, or by details of costume or architecture, that these few ivories may be discriminated from the work of other countries and conjecturally ascribed to our own. This is the case with a large openwork diptych formerly in the Spitzer Collection, and with other examples in openwork, notably

a fine panel representing Our Lord between St. Peter and St. Paul beneath rich architectural canopies, in the Victoria and Albert Museum (No. 213, 65); also with the diptych with standing figures of Our Lord and the Virgin in the Salting Collection, exhibited in the same Museum. The British Museum is fortunate in possessing an ivory which is not without affinity to the last and affords more definite evidence of English origin. This is the triptych (Wall-Case 39 and fig. 118) bearing shields with the arms of John Grandison, Bishop of Exeter (d. 1369), whose episcopal throne is to be seen in Exeter Cathedral. The work and the types repre-

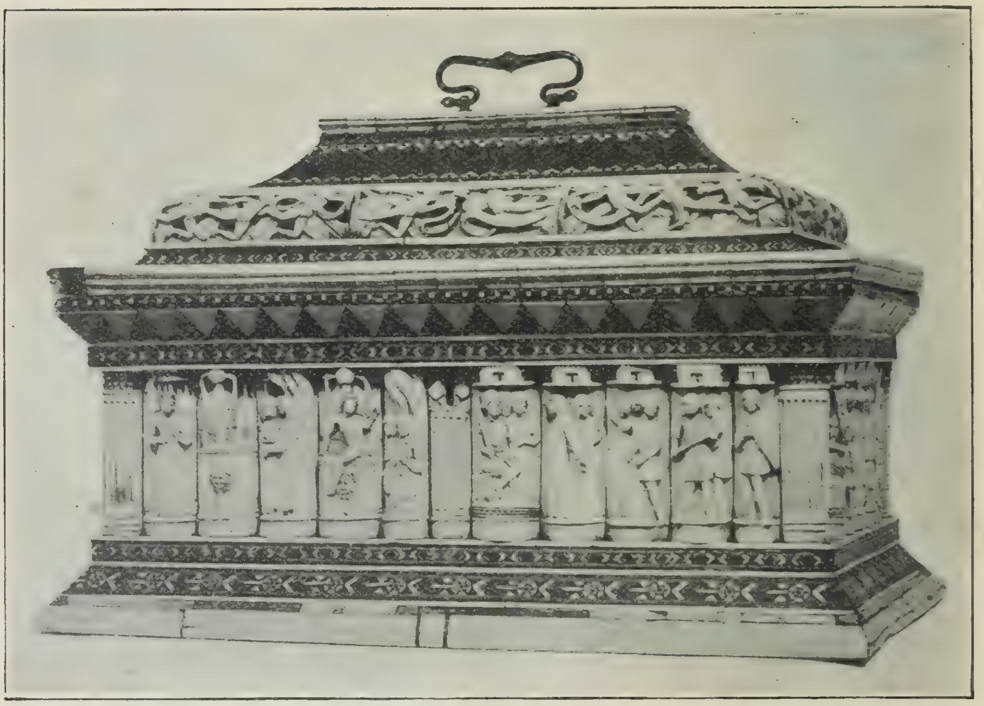


Fig. 119.—Casket with carved bone and intarsia, North Italian, about 1400.

sented are quite distinct in style from anything Continental, and have that individual and original stamp which has nearly always been a constant feature in English art. By the same hand is a panel of a diptych in the same Wall-Case, the other leaf of which is in the Louvre at Paris. It is to be regretted that the surviving English ivories are so few; perhaps the disproportionately small number may in part be due to wholesale destruction during the Reformation. The objects mentioned in early inventories, such as the Salisbury inventory of A.D. 1214, need not have been of English manufacture.

A certain number of Gothic ivories are assigned to Germany,

but these as a rule differ less markedly from the French examples. In Italy, ivory carving does not appear to have ever been generally popular. The most famous early example is the well-known statuette of the Virgin and Child by Giovanni Pisano in the sacristy of the Cathedral at Pisa, but the Louvre has carved ivory decorations of two saddles made in Italy and Sicily in the thirteenth and early fourteenth centuries. Italian ivory croziers of a distinctive character were made before A. D. 1350; one, in the Salting Collection at South Kensington, belonged to Benci Aldobrandini, Bishop of Gubbio in A.D. 1331, whose arms are upon its cuir-bouilli case: others are in the Cathedral Museum at Siena. After the middle of the century, Italy seems to have preferred bone to ivory, and at its close great numbers of altar-



FIG. 120.—Ivory casket with subjects from romance, French, fourteenth century.

pieces, triptychs (Wall-Case 40), diptychs, caskets (fig. 119), and mirrors with bone reliefs mounted in marquetry (intarsia) were made in the workshops of the Embriaco family at Venice. The caskets and mirrors are usually ornamented with subjects from the French romances, for in the fourteenth century the feudal society of Northern Italy was entirely under the influence of French culture. The intarsia work with which they are combined, from the fact that it was frequently executed by Carthusian monks, is commonly described as *alla Certosina*.

The *subjects* of the ivory carvers are those which were generally in favour throughout the Middle Ages, and may be divided into the two great classes of religious and secular. The former, where they do not consist of isolated figures of sacred persons and saints,

are chiefly derived from the Gospel narrative, the Apocryphal Gospels, and the *Golden Legend* of Jacobus de Voragine, Bishop of Genoa (d. A. D. 1298), a compilation of early legends amplifying the story of Christ and the Virgin, and relating the miraculous lives of the Saints. Subjects from the Old Testament, so popular in Early Christian Art, and so often employed by the enamellers of the Rhine and Meuse in the twelfth century, now became very uncommon on ivories: the great majority of these diminutive reliefs were devoted to the Passion of Our Lord and to the glori-



FIG. 121.—End of the casket, fig. 120. Tristan and Iseult, with King Mark in the tree; the capture of the unicorn.

fication of the Virgin. The commonest arrangement for a diptych is the association of the Virgin and Child between angels with the Crucifixion (fig. 117), or of the Nativity with the Crucifixion or Last Judgment.

The secular subjects are derived from the cycles of Romance, or are simple illustrations of the life of knightly *courtoisie* as it was lived in the feudal castles of Europe. The adventures of Launcelot, Gawain, and Tristan, or of Aristotle, Virgil, and Alexander, are of common occurrence. A very favourite subject for illustration on caskets, where the considerable space available allowed series of scenes to be represented, was the complete story of the Châtelaine de Vergy, a metrical novel of some literary merit. Several caskets so decorated have been preserved; one is

shown in Table-Case **F**. Another favourite scene is the attack on the Castle of Love, seen on the lid of the other casket in the same case. Hunting- and hawking-scenes, the meetings of lovers, representations of chess and other games played in the halls of the castle after the tables were removed, are the commonest subjects on the combs and mirror-cases which were made in such quantities for ladies' use (Table-Case **F**).

The Mahommedan countries continued to carve ivory during the later Middle Ages, inlaying panels of this substance in their wood-work. These panels are commonly carved with inscriptions in characters of large size, producing a highly decorative effect (Table-Case **F** and fig. 22).

Like much of the monumental sculpture in the mediaeval



Fig. 122.—Ivory medallions. On the left, Samuel Pepys the diarist (1622–1703), by Le Marchand ; in the middle, Sir Christopher Wren, by Le Marchand ; on the right, the Duke of Cumberland (d. 1765).

period, ivory carvings were painted either wholly or in part with colours. Though in the majority of cases this polychromatic decoration has almost entirely disappeared, traces of it may very frequently be detected ; while in rarer instances diptychs and statuettes have come down to us with their colour almost intact. Although we now prefer the mellow tone of old ivory without the addition of colour, the taste of our ancestors was in favour of something brighter ; and in this they shared the opinion of the Greeks, whose sculpture was also largely polychromatic. Usually, but not always, the scenes upon diptychs with numerous subjects are read like the Mediaeval church windows, from the bottom left-hand corner upwards.

With the Renaissance, the art of the ivory carver, though

surviving in most of the countries which had hitherto practised it, ceased to enjoy the same degree of popularity. The cause of this change is obscure: it may have been partly a matter of fashion. In Northern Italy in the second half of the fifteenth century there was a brief return to the use of ivory, and panels for decorating caskets, with the Triumphs of Petrarch, were made at Mantua and Verona by sculptors influenced by the School of Mantegna. A work of greater merit in the Louvre is a triptych with subjects from the life of Christ executed in the Florentine style of the period, and of such beauty that they may be ascribed to an artist of repute, perhaps to Benedetto da Maiano. Other North Italian ivories of the late fifteenth century, possibly produced at Venice, show Flemish or German influence. To the same city may perhaps be assigned certain medallion portraits in ivory dating from the following century, while some of the carved powder-horns in various collections, which are of similar date, may be Italian.

In France, certain combs and mirrors of the first half of the sixteenth century, with rather low reliefs upon hatched grounds, continue the methods of the expiring Gothic period, though introducing new forms and styles of ornament. A few paxes of the same half of the century are under the evident influence of Flemish art. Somewhat later, dagger-sheaths or hilts, powder-horns, &c., were decorated with classical and allegorical figures of great merit in the style of the full Renaissance.

In Germany, subjects from engravings and pictures by Dürer, Hans Sebald Beham, and other artists were occasionally reproduced in ivory, but statuettes and allegorical groups of more original merit may also be ascribed to German art of this period.

The Iberian Peninsula, where Gothic traditions persisted late, was exposed to influences from Italy, France, and Flanders. To the close of the sixteenth century and to the century which followed must be assigned a large and inferior class of statuettes and reliefs in the domain of religious art, especially figures of the Virgin and St. James, crudely gilded or coloured, and thought to have been made in the Spanish and Portuguese colonies. It may also be noted that the negroes in Portuguese territory executed some remarkable ivory carvings at this period: a number of cups, horns, and other objects from Portuguese West Africa may be seen in the Ethnographical Gallery (Standard Case **SS**).

The ivory carvers of the seventeenth and eighteenth centuries endeavoured to exceed the limitations imposed upon them by their material in the treatment of figure subjects, and, forgetting the proper conventions accepted by earlier centuries, attempted to emulate the manner of monumental sculpture. For the subjects of their bas-reliefs they sought inspiration in the works of Rubens and his school, especially favouring mythological and Bacchanalian

scenes, in which the nude is treated in the exuberant manner characteristic of that master. A frequent religious subject was now the crucifix, which, as we have already seen, was comparatively rare in earlier periods. Here again carvers of limited talent essayed effects beyond their powers, with the result that their work is usually mediocre and unconvincing, in spite of the obvious effort after expression and sentiment. More successful are some of the portrait medallions reproducing the features of contemporary personages, and the less pretentious objects, such as snuff-raps, bonbonnières, or fan-handles, in which the craftsmen were content to aim at an appropriate decorative effect, and did not usurp the functions of the greater arts.

The most conspicuous names in this period are those of the Flemish artists François Duquesnoy, otherwise known as François Flamand or Il Fiammingo (b. 1594, d. 1646), and his contemporary Gérard van Opstal or Obstal (d. 1668). The former was a sculptor of merit who studied in Rome and was the friend of Nicolas Poussin; he is known to have carved in ivory, but as his works in this material were not signed, they cannot be certainly distinguished from those of other artists; it can only be presumed that some of the finer reliefs, in which the prevailing exuberance is checked by a feeling for the antique, are probably by his hand. Of the art of Gérard van Obstal more is known. Born in Antwerp, and dominated by the influence of Rubens, he went to France and worked for French patrons. Two of a series of bas-reliefs in openwork, with Bacchanalian subjects, now in the Louvre, are signed by him, and are the authoritative examples of his style. Lucas Fayd'herbe of Mechlin (1617–1694) actually worked in the studies of Rubens, and though, like the two sculptors already mentioned, he did not confine himself to ivory, many of the reliefs with mythological and Bacchanalian subjects in the style of Rubens may be assigned to his hand.

In France the best-known names are those of Michel Anguier of Eu (1614–1686), Jean-Baptiste Guillermin (d. 1699), Le Geret, Simon Jaillot (d. 1681), who made crucifixes, David Le Marchand of Dieppe (d. 1726), and Cavalier, who carved medallion portraits (examples in the Table-Case F). Both the two last-named worked for a time in England, the former signing his portraits D.L.M. Dieppe was then celebrated as the centre of French ivory carving, and had possibly practised the art for more than a century. In the eighteenth century there was a great decline, partly caused by the growing popularity of porcelain figures, though there was still a considerable output of small bibelots and religious figures of slender artistic value. In more recent times there has again been something of a revival.

Germany in this period followed the Flemish style, decorating flagons and other vessels with mythological and Bacchanalian

subjects. The relief is very high, and there is the same misplaced effort to work in the manner of the sculptor in marble. Flagons of this kind were fitted with enamelled mounts at Augsburg and Nuremberg (example above Table-Case F). Of known artists producing reliefs in ivory may be mentioned Christoph Angermayer (d. 1633) (Case 43), whose best work dates from the earlier part of the seventeenth century: his subjects were both religious and secular, and he was capable of greater refinement and restraint than most of his contemporaries. Balthasar Permoser (1651–1732) reproduced in ivory with great success the bronze statuettes and groups of John of Bologna. Three members of the Zich family working chiefly in the second half of the seventeenth century at Nuremberg produced *tours de force* in the Chinese style, such as ivory spheres contained one within the other (Case 43). During the eighteenth century there were a number of ivory carvers, chiefly in the South of Germany, examples of whose work can be seen in the Bavarian National Museum at Munich.

In Italy the sculptor Alessandro Algardi (d. 1653) is said to have made crucifixes and other figures in ivory in his youth. Giovanni Pozzo carved medallion portraits in the early eighteenth century, and Bonzanigo (d. at Turin 1820) was famous for his foliage in ivory and wood, and for portraits framed with allegorical and emblematic designs of minute execution.

JEWELLERY.

Down to the sixteenth century the small articles of personal adornment which we call jewellery were made by silversmiths; but at that period the minuter work called by the Italians *minuteria* began to occupy the attention of a distinct class of artificers who were now known as jewellers. It is advisable, however, for the avoidance of confusion, to consider the jewels even of the earlier period apart from the larger objects with which they were made.

In the course of the centuries the fate which overtook silver plate also befell ancient jewellery: its intrinsic value proved its ruin. It was melted down to be replaced by work in a newer fashion, or to meet financial needs; or again it was pawned for ready money, even the French crown and the papal tiara having been pledged in their time. Though the royal and princely treasures as recorded, for instance, in inventories of the time of the Valois Kings in France must have been of extraordinary splendour and quite out of proportion to the general wealth, it is only from these written documents that we can estimate their true extent, for nearly all of the objects described have disappeared. The more sumptuous jewels and ornaments of mediaeval date are

therefore rare, but what remains suffices to give us a clear idea of certain characteristic forms and methods of ornamentation; for like larger objects, they were affected in their degree by alterations in architectural style or in the forms of lettering, and by all the various fashions of the hour, so that it is usually possible to give them an approximate date.

The ornaments worn upon the person were comparatively few in number. For the Middle Ages, brooches, finger-rings, belts, chains, and pendants almost exhaust the list: while the Renaissance preserved these ornaments, only modifying their style, and adding little that was essentially new except the *enseigne* or disc-shaped ornament affixed to the hat, and the brilliant enamelled and gemmed pendant jewel. A profusion of pearls upon the head-dresses and costumes of ladies is also characteristic of the later time. It is difficult, if not impossible, at all events for the earlier periods to distinguish the more ordinary ornaments of one country from those of another: English brooches or rings, for example, are very like French in the fourteenth century, when even the mottoes and short inscriptions were written in French in both countries. Small jewels and ornaments must have been made everywhere, and the numerous examples with English inscriptions prove that articles of native manufacture were similar to those made abroad. In these early times gems were usually cabochon (i. e. polished, but unfacetted stones) in raised settings, the fashion of cutting and facetting surfaces not coming in until the Renaissance. In the rare examples of jewellery of the twelfth or thirteenth centuries, fine filigree was often used in association with gems, as in a remarkable fragment from a crown in the Franks Bequest (Passage to the Gold Ornament Room), but filigree became less popular in later times. From the close of the fourteenth century designs are often filled with enamel; and where whole figures are enamelled, as in the small *tableaux* (see below), the translucent variety on sunk relief is usually employed. The jewellery of the Middle Ages is largely ornamented with sacred subjects or devices, and the inscriptions are often religious. But this is by no means universally the case, and floral designs in the various Gothic styles, and posies or love mottoes are very frequently found. In England the lettering of such inscriptions is Lombardic (see p. 182) down to the middle of the fourteenth century, and from that time to the Renaissance black-letter: after this the Roman characters come into use.

In the sixteenth century the mediaeval style was abandoned. Gothic floral ornament was replaced by conventional designs, grotesques and strapwork; the engraved saints gave way to Cupids and mythological figures executed in relief or in the round, and chased with the utmost refinement and skill. Gems were now facetted and cut, large baroque pearls freely employed as

pendants, and enamel used to cover rounded surfaces. Among the rings in the Gold Ornament Room, and the enamelled jewels in the Waddesdon Bequest, the new style is well illustrated. It was the period of Cellini and of the celebrated designers Du Cerceau and Étienne Delaulne in France, of Virgil Solis and others in Germany, and of Collaert in Holland. After the beginning of the seventeenth century the human figure became rarer upon jewels, while naturalistic flowers and rosettes composed of gems were the favourite motives of the designer. The multiplication of

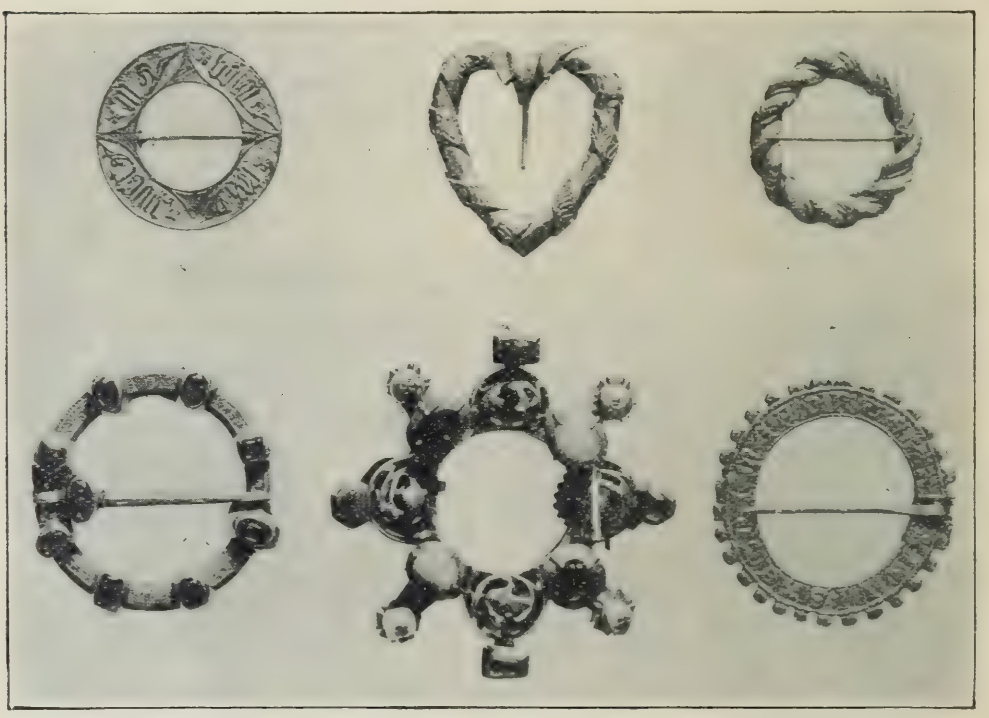


Fig. 123.—Gold brooches, mediaeval (Franks Bequest).

small gems, finely cut and facetted, marked the work of the eighteenth century, which is in absolute contrast to the old mediaeval method of employing a few large cabochon stones disposed at rare intervals upon the metal. A great deal of information as to the style and character of mediaeval jewellery may be derived from a study of illuminated MSS., and from the perusal of the inventories of kings and great nobles, that of Charles V of France describing with great accuracy numbers of jewels in the royal possession. The sources available for later periods are naturally more numerous, contemporary engravings and pictures reproducing personal ornaments with much fidelity. A few notes on special forms may be inserted here.

Belts were sometimes entirely of metal or of leather or stuff

ornamented with chased and jewelled plaques. The end, which it was the fashion to wear long depending to the knee, was often very finely ornamented: an example of such an end is shown in Table-Case **A**.

Bracelets seem to be of great rarity before the fifteenth century, when references begin in the inventories to examples of gold enriched with gems and enamels.

The mediaeval *brooch* is usually of the ring type, as shown in fig. 123, a form known in much earlier times. The ring itself in some of the more precious examples is adorned with gems in high settings; but more commonly it is engraved with a design, motto, religious or talismanic sentence supposed to possess magical and prophylactic power. The mottoes coincide with those used on rings, and take such forms as *je suis ici en lieu d'ami*, *en espoir ma vie endure*, *mon cœur avez sans départir*, and the like. Among religious inscriptions *Ave Maria gracia plena* and *Jesus Nazarenus*, which are found upon the most various objects of domestic use, especially upon the frames of *gypcières* (see p. 242), are very common. Purely magical inscriptions are best represented upon rings, which are more numerous, and will be mentioned under that heading.

Buttons of the precious metals were worn in great numbers by the wealthy from the second half of the fourteenth century, when tight-fitting garments had replaced the loose robes of earlier times. In the sixteenth century they were often enamelled: an item in the inventory of Mary Queen of Scots mentions four hundred and four enamelled buttons, each with a ruby in the centre.

Chains were worn round the neck and used for suspending any kind of jewel, but mediaeval examples are very rare, the collection possessing none: chains of far earlier periods are more frequent than those of mediaeval date because they are found with hoards or interments. At the end of the sixteenth century and during the seventeenth, beads of perfumed composition were worn upon chains: at the time of her execution Mary Queen of Scots was wearing such a chain, from which an Agnus Dei was suspended.

Mirrors of metal and of small size mounted in gold and silver were worn attached to the girdle or carried in the hand. The more sumptuous examples were enamelled and set with gems.

Pendants in the fourteenth and fifteenth centuries sometimes took the form of minute diptychs or triptychs of gold and silver enamelled with religious subjects: these were called *tableaux*. After the Renaissance the most remarkable pendants were the enamelled gold jewels enriched with gems and baroque pearls, the latter ingeniously disposed to form the bodies of fantastic animals and figures. They were chiefly made in Italy, France, and Germany, and a large proportion come from the latter country (fine examples in the Waddesdon Bequest). But Spain,

where various influences from France, Italy, and Flanders were active at this time, also produced jewels of this kind, those with religious subjects being in many respects the most characteristic. The *memento-mori* in the form of a death's-head or coffin was frequently worn as a pendant in the sixteenth century. *Pomanders* (der. from the French *pommes d'ambre*), balls of scented substance, were also worn as pendants from the neck or girdle, and had been used since the fourteenth century as remedies against bad odours or infection (a Spanish example set with emeralds is exhibited in the Franks Bequest). The ingredients were ambergris, benzoin, musk, civet, and other perfumes, often mixed with fine earth. The name, at first signifying the perfumed ball, was transferred to the receptacles in which it was carried, which were commonly of gold or silver and partly of openwork, in order that the perfume might readily escape. Some examples, instead of a single ball of scented substance, have several compartments each containing a different perfume. Pomanders were common from the fifteenth to the eighteenth century, and it will be remembered that they formed part of the contents of Autolycus' pack in the *Winter's Tale*. A fine pomander case of the early sixteenth century, dredged from the Thames, is exhibited in the Gold Ornament Room, Case **W**.

Rings, which have been worn from the time of the Early Egyptian dynasties onwards, are the articles of mediaeval jewellery which are found in the greatest numbers, whereas ear-rings, though also of very ancient use, seem to have been little favoured between Frankish times and the Renaissance. The most important use of finger-rings was to serve as signets, a device being either engraved upon the metal itself or upon a stone set in the bezel. From the Carlovingian period to the fourteenth century the art of engraving hard stones was little if at all understood, and its first revival at that period was at first perhaps confined to Italy (see p. 140). Antique gems were therefore frequently employed, and these were all the more popular if their subjects bore a superficial resemblance to those most in demand by Christians, the head of Jupiter Serapis being described as the head of Our Lord, and Jupiter with his eagle serving as the Evangelist St. John. The signet-ring has been in continuous use since its first adoption, for after the fall of the Roman Empire the Teutonic tribes soon learned its advantages. The varieties are too numerous to be described in detail; but it may be mentioned that armorial signets, which were fashionable in Italy in the fourteenth century, were not common in England until nearly two centuries later. In England from the twelfth to the fourteenth century finger-rings usually have plain hoops and contain a single uncut stone (figs. 124–126). Attention may be particularly drawn to the rings found with coins of Henry II (d. 1189) in the Gold

Ornament Room (Case W, and fig. 126). In the fourteenth century rings were frequently engraved with designs and inscriptions, while in the fifteenth century the engraving of legends and figures (especially those of saints) was a constant feature, and enamel was used. With the Renaissance, the forms which Italy had adopted more than fifty years earlier became general in Western Europe, and strapwork with chased and enamelled figures in relief came into fashion. Coats of arms, as already mentioned, were now also engraved on signet-rings, and various new types came into fashion, such as the *fede-ring* and the *decade*, most of which are described below. Mourning-rings were most in favour in the seventeenth and eighteenth centuries, posy rings in the same period, the fashion of wearing both was almost

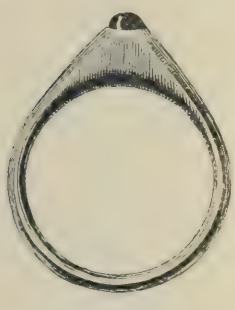


Fig. 124.—Gold ring with sapphire, thirteenth century.



Fig. 125.—Gold ring with sapphire, twelfth century.

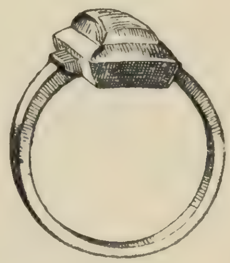


Fig. 126.—Silver ring with amethyst, found with coins of Henry II.

exclusively English. It should be noted that rings were not confined as now to the four fingers or to the lower joints. They were commonly worn upon the thumb and upper joints, and may be seen in these positions in well-known pictures, such as Raphael's portrait of Julius II: these fashions explain the occurrence of rings exceptionally large and exceptionally small in size. It may be recalled that under the Roman Empire the fingers of fops were covered with rings almost to the tips and that Shakespeare alludes to an alderman's thumb-ring, through which Falstaff in his youth might have crawled.

Bow-rings of horn or stone (crystal, chalcedony, onyx, &c.) are used in the East for releasing the bow-string, and worn upon the thumb of the right hand, the narrow part of the hoop, upon which the string rests, being turned inwards. They would appear to have been known to Europeans connected with the East, as the collection contains a splendid nielloed gold ring of this type made in Venice at the close of the fourteenth century (fig. 127). Oriental examples may be seen in the Franks Bequest and in the Ethnographical Gallery (Table-Case 207).

Cramp-rings. It is recorded that the ring of Edward the Confessor, removed from his coffin in 1163, was kept for a long time at Westminster, and applied for the cure of cramp and for the falling sickness. At some date not precisely known, and perhaps in connexion with this practice, the Kings of England began to bless rings as preservatives against the above-mentioned maladies. The ceremony, which is first mentioned in the reign of Edward II, took place on Good Friday, when the money of the royal offering was converted into rings. These the king rubbed between his hands while prayers were repeated, the idea being that the virtue in the king's touch was derived from the sacred oil with which they had been anointed at his coronation. The blessing of the rings was discontinued by Henry VIII, but revived by Queen Mary. These royal cramp-rings were held in great repute, and were often sent abroad as presents. They were perhaps plain hoops of silver or gold; but no certainly authentic example has survived. Other rings, which had never been hallowed by the kings, were also worn against the cramp, and were inscribed with magical formulae of the kind described on p. 177.

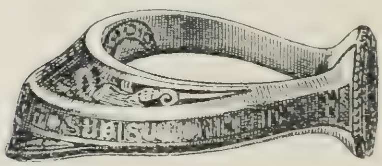


Fig. 127.—Bow-ring of Zeno Donati, fourteenth century.

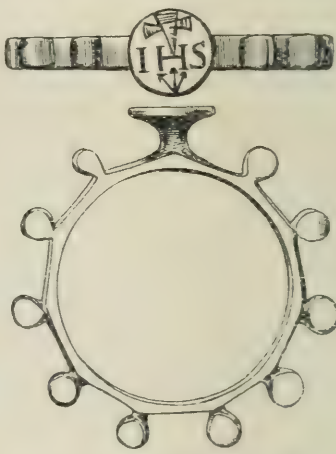


Fig. 128.—Decade ring.

Decade rings, so called from the ten projections upon the circumference, were used to serve the purpose of rosaries, each projection representing an *Ave*, and the head or bezel, which was sometimes engraved with I.H.S. and the three nails, the *Pater Noster.* The earliest examples of rings claimed as decades go back to the fourteenth and fifteenth centuries, and some rings so described have more than ten knobs or protuberances.

Episcopal or *Pontifical rings*, which have formed part of a bishop's insignia from a very early period, and are mentioned in rubrics of the sixth century, were worn by the bishop, when vested, upon the last finger but one of the right hand (the annular finger): as they were drawn over a rather thick silk glove, these rings were rather larger than those now in use. Bishops were in the habit of wearing several rings, which were never below the

second joint of the finger ; they also wore rings upon their thumbs. On the figure of Archbishop Chicheley in Canterbury Cathedral a thumb-ring and episcopal ring may be seen, but neither is upon the lowest joint. Pontifical rings were never, or very rarely, engraved as signets, the bishops' seals being cut upon separate matrices which, like the seals of abbots, were usually broken in pieces upon their decease. The rings which bishops were in the habit of bequeathing to kings, according to a common mediaeval custom, were not their pontifical but their personal rings: their episcopal rings were often buried with them as in the case of several bishops of Durham beginning with Ralph Flambard (1099–1128). The favourite stone for the pontifical ring was the sapphire ; but the emerald and ruby also occur, and sometimes rubies are added to the sapphire, as in the ring which William of Wykeham bequeathed to his successor in the diocese of Winchester. According to the ancient lore which ascribed mysterious properties to the various precious stones, the sapphire was said to have the power of subduing desire, growing dim when worn by the unworthy : it was also the colour of the Virgin, and thought to be in peculiar sympathy with the heavens. The rings of the early bishops were of various materials and were sometimes engraved with designs ; but in A.D. 1194 Pope Innocent III decreed that they must be of gold, and that the stones with which they were set must not be engraved.

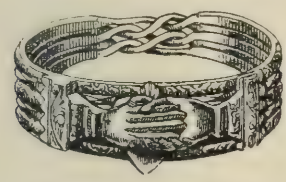


FIG. 129.—Fede puzzle-ring.

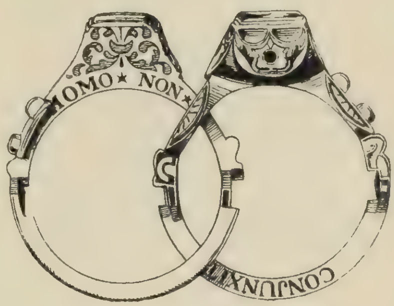


FIG. 130.—Gimmel ring.

Fede-rings (fig. 129) are rings the bezel of which is formed by two clasped hands, signifying plighted troth. The form goes back to Roman times, and was common during the Middle Ages and later. Some fede-rings were also *gimmel* or puzzle-rings. The rings used at weddings by the fisher community of the Claddagh at Galway, the bezels of which represent two hands holding a heart, are derivatives of the fede type.

Gimmel rings (fig. 130). The name of these rings is derived from the French *jumelle* = twin, and they are so called because made of two flat hoops fitted so closely to each other as to have the appearance of an undivided ring. Each half might be engraved

with a name or a motto, and worn by a different person ; the ring might thus serve as evidence to establish identity or good faith, as in Dryden's play of *Don Sebastian.*

Iconographic rings. This rather cumbrous name of Greek derivation has been given to a class of rings, chiefly of the

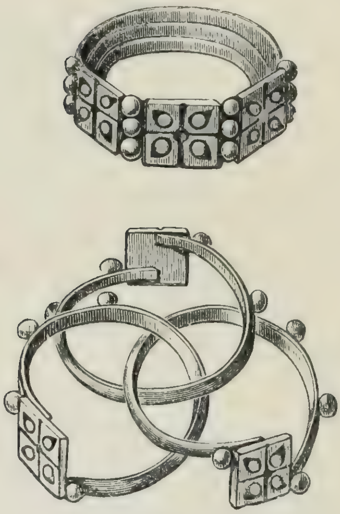


Fig. 131.—Puzzle-ring.

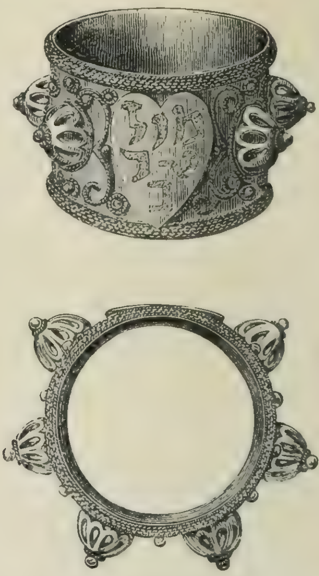


Fig. 133.—Jewish betrothal ring.

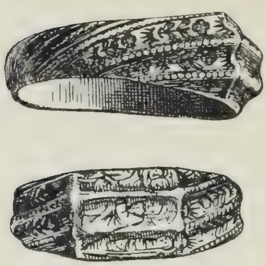


Fig. 132.—Iconographic ring, fifteenth century.



Fig. 134.—Toadstone ring.

fifteenth century, engraved with figures of divine persons and saints. The figures are engraved upon the metal bezels, very commonly in pairs, and were originally in many cases nielloed or enamelled. Two very favourite saints are St. Barbara and St. Christopher, the former of whom was held to protect men from sudden death, the latter from various perils of sickness,

tempest, flood, and earthquake. Fig. 132 is an example of the class.

Jewish bethrothal rings (fig. 133), of which examples may be seen in the passage to the Gold Ornament Room, in the Waddesdon Bequest (Nos. 195–6) and in the Second North Gallery (Wall-Case 33), were not intended to be worn, but after being placed on the fingers of the contracting parties during the ceremony, were kept by them as mementos. The bezels of these rings are usually in the form of a building, which represents either the Temple at Jerusalem or the Ark of the Covenant: inside the hoop are engraved in full or in an abbreviated form Hebrew characters signifying Good Luck, or Joy be with you. Those in the Museum are German or Flemish work of the sixteenth and seventeenth centuries.

Magical rings. Rings were constantly worn as a protection against disease, misfortune, or malefice, sometimes because the stones with which they were set, in accordance with the almost universal belief in ancient times, were possessed of mysterious properties (the very word amethyst, for instance, implying protection against drunkenness), more frequently because they were engraved with magical inscriptions which gave them the value of talismans. Several rings and brooches in the collection have magical legends, and the word ANANIZAPTA is engraved with the names of the three kings of Cologne in the interior of the gold ring (fig. 42) on which are represented the five wounds of Our Lord, themselves regarded as prophylactic against evil.

Under magical rings may be included those set with 'toadstones' (fig. 134). These are really the palatal teeth of the fossil ray, but were popularly believed to be stones taken out of toads' heads. Some existing examples are ascribed to the fifteenth century, and in the inventory of the Duc de Berri (d. 1416) there is mention of a 'crapaudine' set in a golden ring. They were supposed to protect new-born children from the power of fairies; and water in which they had been immersed was considered a specific against diseases of the kidneys. The superstition as to the power of toadstones persisted down to modern times: Joanna Baillie, in a letter to Sir Walter Scott, refers to a ring in possession of her mother which was frequently borrowed on the occasion of births in neighbours' families. (See also **Magic**.)

Motto and *Posy rings*, popular among the Romans, were much used in the Middle Ages. The word posy is derived from the French *poésie*, poetry. The gift of a 'posy' or verse was often accompanied by a flower or bouquet, to which the term has now been transferred; a posy ring is therefore one engraved with a motto or verse, whether of an ethical or religious or of an amatory character. Many rings of the fourteenth and fifteenth centuries have mottoes of the former description, such as *in Deo*

salus; tout pour bien fayre (*faire*), &c.; these are often engraved inside the hoops of the iconographic rings (see p. 176). Although the custom of engraving mottoes on rings was general in mediaeval times, and many such mottoes may have had allusion to betrothals, it was in the period between the sixteenth and eighteenth centuries that the regular posy rings so numerous in large collections were made. These are usually plain hoops with the motto engraved in the interior, used by all classes as betrothal rings. The same mottoes are found constantly repeated, and little originality of poetical skill is manifested in their composition. The following are a few of the favourite verses: *In thee my choice I do rejoice; God above increase our love; O Lord us bless in happiness; As God decreed so we agreed*, &c., &c. A large number of these rings are in existence.



Fig. 135.—Posy ring, fifteenth century.



Fig. 136.—Posy ring, seventeenth century.

Papal rings (fig. 137). These huge rings of gilt bronze set with glass paste, and usually bearing in relief upon the shoulders the arms of a pope, date from the fifteenth century and later. The purpose for which they were made is not quite clear, but they are supposed to be emblems of investiture with papal fiefs, or credentials authenticating some important mission. Some of them have the arms of a king as well as those of a pope; others occur in duplicate, which seems to dispose of the theory that they were made to be buried with dead popes in place of rings of great intrinsic value. A few rings of similar character are regal and not papal.

Poison rings. The device of carrying poison in a cavity either of the hoop or stone of a ring was known to the Greeks and Romans: several stories from ancient history record the use of

such rings by desperate persons; thus Pliny relates that the guardian of the Capitol, arrested for permitting a sacrilege, broke the gem of his ring in his mouth and immediately expired, the stone having been cut so thin as to be easily broken by a bite. In more modern times the philosopher Condorcet, when imprisoned by the Convention, committed suicide in his cell by means of poison which he had concealed in his ring in readiness for such an emergency. Though it is known that rings were actually used to contain poison, and though such objects were quite in accord with the spirit prevailing at the time of the Borgias, it is not safe to describe all the examples in which cavities are found as poison rings. Cavities closed with covers were used to contain perfumes, diminutive sun-dials, and other things of a harmless character.



FIG. 137.—Papal ring.

Sergeants' rings were presented to all brother sergeants, important personages, and to friends by sergeants-at-law on their elevation to their new degree. The custom is mentioned as one long established in 1429, the office of sergeant having existed from the middle of the thirteenth century. The expense of having the rings made was very considerable; thus in 1736 fourteen sergeants gave away 1,409 rings, costing them each about £55. The rings were usually plain hoops without bezels, engraved with mottoes relating to the law. An early example of the fifteenth century in the collection has *Vivat rex et lex*; that shown in fig. 138, which may be regarded as a typical example of comparatively modern date, has *Leges sine moribus vanae*.

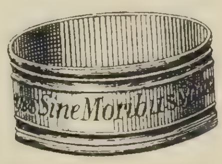


FIG. 138.—Sergeant's ring.

KNIVES.

At a time when even spoons were rare and forks unknown (see p. 134) knives were indispensable. The makers of knives and their handles formed two distinct corporations in the Paris of the thirteenth century, for the handles were often elaborately carved or decorated with designs, mottoes, and coats of arms, some being

of ivory with silver mounts, others of silver with rich ornament or translucent enamel. The latter style is characteristic of the late fourteenth and early fifteenth centuries, and is well illustrated by the fine set of knives in a cuir-bouilli case, made for John the Intrepid of Burgundy (Table-Case **B** and fig. 139). The blades seem to have been made rather thin, for even the large and broad examples are often very narrow at the backs: the upper parts were sometimes engraved or damascened. Carver's knives were constantly used in sets, and kept in leather sheaths or cases as in the example already mentioned. The larger sort, of two kinds, were for cutting meat and bread for the company; the smaller

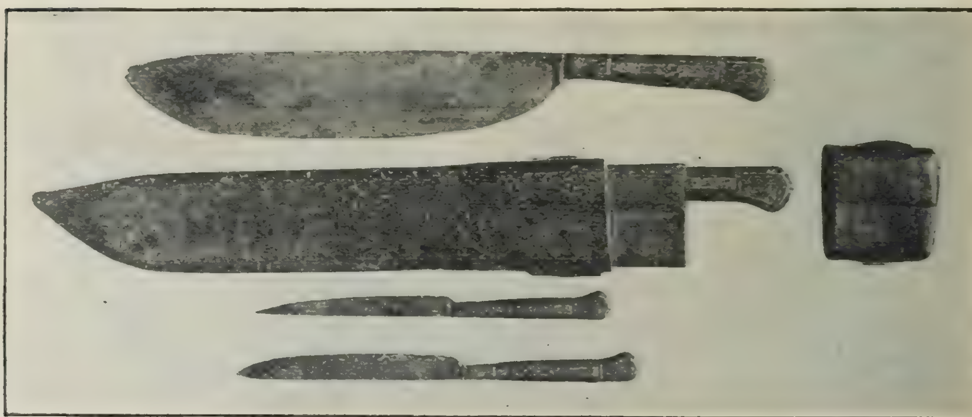


Fig. 139.—Set of knives made for John the Intrepid, Duke of Burgundy (d. 1419).

knives for the use of individuals at the table. At the table of a prince or great noble the esquire carver carried his lord's personal knives in the sheath with the carving-knives, placing them by his side when the meal began, and being himself responsible for their custody. Knives with very broad blades, called in French *présentoirs*, were used for helping the guests by conveying the slices or portions from the dish to their trenchers. In France, the cities of Paris, Beauvais, Langres, and Périgueux were famous for their knives in mediaeval times; in England the reputation of Sheffield was already established in the fourteenth century. *Hunting-knives* were carried in cases suspended from the right side of the girdle: there were generally two of different sizes accompanied by smaller instruments.

LATTEN. *See* p. 262.

LEATHER BOTTLES.

The use of leather for bottles is of great antiquity and the material was naturally employed for the purpose of containing liquids in the Middle Ages. To the sixteenth and seventeenth centuries belong the barrel-shaped costrels and the leather jugs which are to be seen in many museums and old houses in England. The most familiar form of jug is the 'black jack', so called either because it was made of jacked leather, or because it more or less resembled a jack, or leathern coat. The larger sizes of the black jack (fig. 140) were known as *bombards,* because their great circumference and large mouths recalled the cannon of that name. At the end of the seventeenth century all these leather vessels fell into disuse owing to the general introduction of pottery and glass vessels.



Fig. 140.—Leather bombard.

LETTERING.

The alphabets used upon mediaeval monuments large and small follow the changes of the written alphabets, but often at a considerable distance of time. Letters are usually divided into two main classes: (1) *Majuscule,* or large, subdivided into capitals and uncials; (2) *Minuscule,* or small, derived from the majuscules as being of a more convenient size. Mediaeval archaeology has chiefly to deal with capitals, uncials, and the Gothic minuscule alphabet familiarly known as black-letter: with the cursive, or running hand, we are not here concerned. *Capitals* may be roughly defined as *angular* large letters, the strokes forming angles except where curves are unavoidable. *Uncials* are *rounded* large letters, in which angles are as far as possible replaced by curves.

At the beginning of the Middle Ages, Roman capitals, the prototypes of our capitals of the present day, were still used; but to a certain extent they were barbarized, while Greek letters con-

tinued to be used for abbreviations of the names Jesus Christ, IHC XPC standing for the first two and the last letters of the Greek word for Jesus, and the first two and last letters of the Greek word for Christ. The letters IHC ultimately became the familiar IHS of our churches. The rounded uncial letters began to appear on monuments during the Carlovingian (later Frankish) period, which commenced about A.D. 800, and they

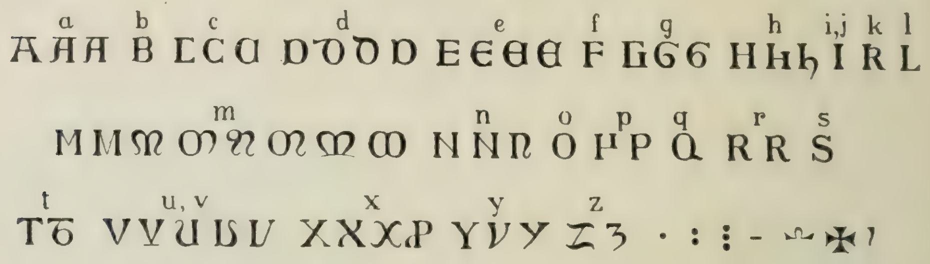


FIG. 141.—Alphabets, eleventh to thirteenth centuries, after Demay.

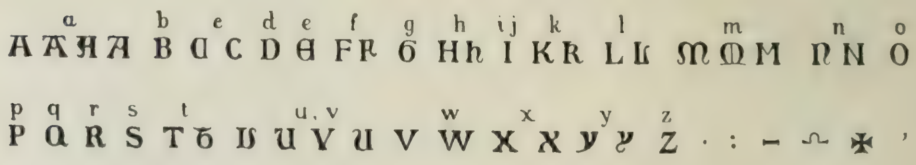


FIG. 142.—Lombardic alphabets, after Demay.

gradually increased in number throughout Romanesque times: fig. 141 illustrates various forms of letters used in the eleventh twelfth, and thirteenth centuries. The complete uncial alphabet, or Gothic majuscule, was not in general use until the last quarter of the thirteenth century, and lasted until the middle of the century following: it is commonly known as *Lombardic*, though this term should strictly be confined to an Italian alphabet perfected in the eleventh century in the Lombardic duchies in the South of the Peninsula. This Gothic majuscule, or so-called Lombardic alphabet, is illustrated in fig. 142. The Gothic minuscule, or black-letter, superseded the Lombardic in Northern Europe about the middle of the fourteenth century. It is too familiar to need illustration, and is in all essentials the alphabet still used in most German printed books, but was never adopted in Italy, where the Lombardic continued until the middle of the fifteenth century. Soon after that time the influence of the Renaissance brought about a general return to the old Roman letters. North of the Alps this change was effected less rapidly, and from the close of the thirteenth century for about thirty years a transitional alphabet was

employed, in which Roman capitals were mingled with Gothic majuscule and minuscule forms: by the middle of the sixteenth century the purer Roman capitals had been generally adopted, except in Germany. The numerals used for dates before the introduction of the Arabic figures, being seven letters of the Roman alphabet (I, V, X, L, C, D, M), naturally followed the developments indicated above, from Roman through Lombardic and black-letter back to Roman again.

Mediaeval abbreviations were very numerous, especially in the

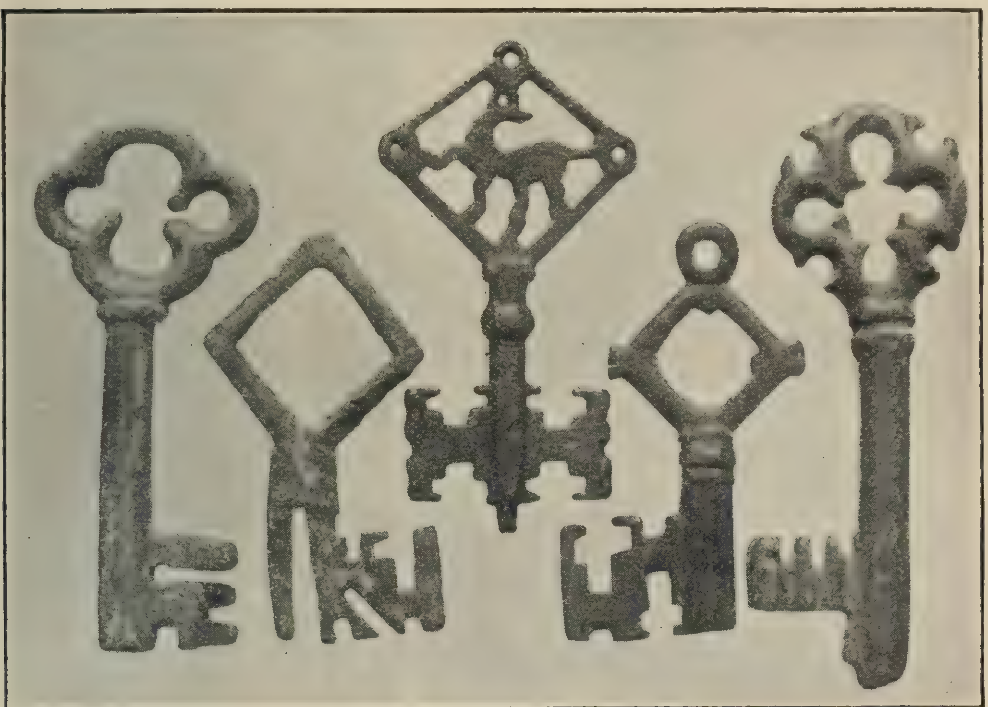


FIG. 143.—Keys of the fourteenth century.

fifteenth century: the reader will find a number of these explained in works on monumental brasses and on seals. The commonest method was to draw a horizontal line above the letter before the omission, or to place a comma after it but above the line (e.g. SIGILLV̄, SIGIL' = SIGILLVM, ROB'TI = ROBERTI). In very common words almost all the letters may be omitted (S' = SIGILLVM, DN̄I = DOMINI).

LOCKS AND KEYS.

Mediaeval locks were almost entirely constructed on the ward system, in which obstacles are placed to prevent any but the

proper key from turning the bolt. It thus differs essentially from the older tumbler system, in which an obstruction is introduced to prevent the bolt from being drawn by the wrong key, the tumbler, as General Pitt-Rivers pointed out, really forming, as it were, the bolt of a bolt. The Romans, who principally relied upon tumblers, had also begun to use wards, the development of which was continued by Frankish and later mediaeval locksmiths. With the progress of the Middle Ages the wards became very intricate, but no amount of complication can make locks of this kind secure, and at some time during the eighteenth century, or even earlier, the tumbler principle was reintroduced. Down to the latter part of the sixteenth century locks were placed outside the boxes, &c., which they were intended to fasten, but at that period they were placed within, only the key-hole showing from the exterior. This change put an end to the manufacture of the beautiful forged iron locks of the fifteenth and sixteenth centuries, which often reproduced architectural forms and were enriched with statuettes or groups under canopies. Examples of such locks, the finest of which were made in France, may be seen at South Kensington.



Fig. 144.—Key of the eleventh or twelfth century, found in Lothbury.

Keys were commonly of bronze down to the fourteenth century, when they began to be made more frequently of iron. The ward-holes increase in number with the growing complexity of the locks; the stems usually terminate in some kind of loop or 'bow' often decorative, and in the fourteenth century frequently shaped as a trefoil or quatrefoil (see top of the ivory casket (in Table-Case **F** and fig. 143). The key became a work of art in the sixteenth century, handles or 'bows' being filled with ornament, and sometimes taking the form of addorsed or confronted monsters or other figures, standing upon the capitals of columns, the shafts of which are represented by the stems. But the stems themselves remained short and undecorated until the seventeenth century, when they assumed more elegant proportions, and were often ornamented.

The precise dating of mediaeval keys is often a difficult matter, as they are seldom found under conditions which in themselves make certainty possible. The frequent representations in works of art are thus of great value. Keys occur on tombstones and

other sculptured monuments such as the font of Kirkburn in Yorkshire, on seals such as that of the city of Exeter (about 1180) and that of the Mayor of the Staple of Westminster in 1393 (fig. 145), and on stained-glass windows and frescoes, where they are seen in the hands of St. Peter, as on the portable altar, plate XIV.

Keys were carried suspended from the girdle on a kind of châtelaine known from the sixteenth century as the *clavandier*.

Attention may be drawn to the keys in Table-Case **B** and to

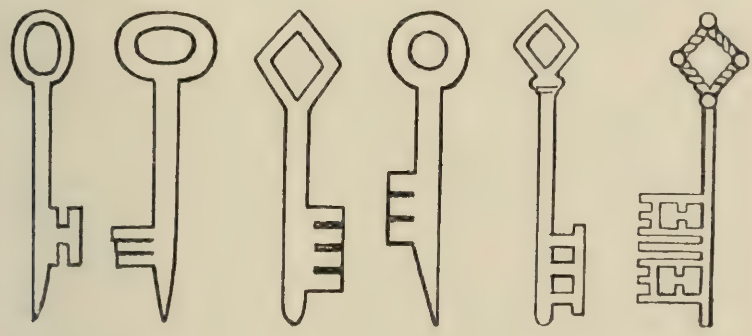


Fig. 145.—Mediaeval keys. The first four from the left are from tombstones of the twelfth to fourteenth centuries at Bakewell, Gateshead, Newbigging, and Bamborough (after Cutts); the fifth is from the Exeter Corporation Seal, end of the twelfth century; the sixth from the seal of the Mayor of the Staple of Westminster, 1393.

the fine series of chamberlains' ceremonial keys, used at various courts from the seventeenth century to modern times, exhibited in Table-Case **H**.

LOMBARDIC. *See* p. 182.

MAGIC.

The word magic is derived through the Latin *magia* and its Greek original, from an oriental word probably of Median origin, and signifying the wisdom of a *magus* or seer. Belief in magic is of immemorial antiquity and universal distribution; while the sense ascribed to the word has at different times comprised every variety of theory and practice which aims at producing results transcending the laws of nature. It has thus been intimately connected at different stages of social evolution with medicine, astrology, and religion; and in its more primitive phases was not necessarily concerned with the evocation or control of personal spirits. This last was an aspect which became more prominent

as civilization advanced, while at the same time the names of gods and spirits, whether written or recited, assumed an increasing importance as 'names of power'. Both Egypt and Babylon possessed at an early date highly developed systems of magic, and both played a most important part in disseminating magical knowledge. The Babylonians originated almost in its entirety the astrology later adopted by the European nations; they also filled the universe with innumerable spirits, and laid great stress upon the occult powers of numbers.

The confused mass of Babylonian and Egyptian magical ideas was sifted and classified by the Greeks, the Romans, and the Jews. Alexandria became the great centre of magical belief, and there in the third century the Neo-Platonists attempted to combine it with Greek Philosophy. The Gnostics continued to work upon similar lines, associating magic with Christianity, and extending the use of invocations, diagrams, and talismans. The Jews after the Captivity had developed from Babylonian sources a whole classification of angels and demons, and it was they who immediately inspired the mediaeval magic of Western Europe. For in the thirteenth century the Spanish Jews compiled the Kabbala, an exposition of theosophic doctrines drawing largely upon the earlier Greek compilations from oriental sources. The prominence of the Jews as transmitters of magical knowledge explains the frequency of Hebrew letters in mediaeval talismanic inscriptions; and the varied nature of the sources from which they drew in like manner accounts for the strange mixture of barbarized Greek and oriental names in magical formulae.

This hybrid character marks a great number of the inscriptions upon mediaeval rings, brooches, and other objects, the purpose of which is either to attract beneficent influences or avert those which are evil (see examples under **Rings, magical**). They are 'names of power' like those in which the ancient civilizations believed, some of them belonging to spirits of earth or of the stars, others associated with the Christian religion, others again, like the names of the Three Wise Men (Magi) from the East (Caspar, Melchior, and Balthasar), forming a link between Christianity and the ancient home of oriental magic. The belief in the power of numbers, which the Babylonians had originated and the Pythagoreans handed down to later ages, is another great feature in mediaeval magic, as also was the belief in the efficacy of certain figures, especially the pentagram, which had been used as a sign of fellowship by the followers of Pythagoras. Passages of Scripture implying the exertion of supernatural power were also commonly transcribed, in order that a similar power might pass to the person who made use of the inscription. Such was the verse 'Iesus autem transiens per medium illorum ibat', &c. (Luke iv. 30), which is of frequent occurrence on mediaeval rings and brooches, being

supposed to extricate from situations of danger and more especially from the assaults of robbers. Among the most frequent magical words are AGLA, which is compounded of the initial letters of four Hebrew words meaning 'Thou art great for ever, O Lord', and ANANIZAPTA, regarded as a specific against the falling sickness.

Mahommedan magic was in part descended from the Jewish lore of angels and demons, in part from the more ancient beliefs of Hither Asia, in part again from the compilations of such Greek

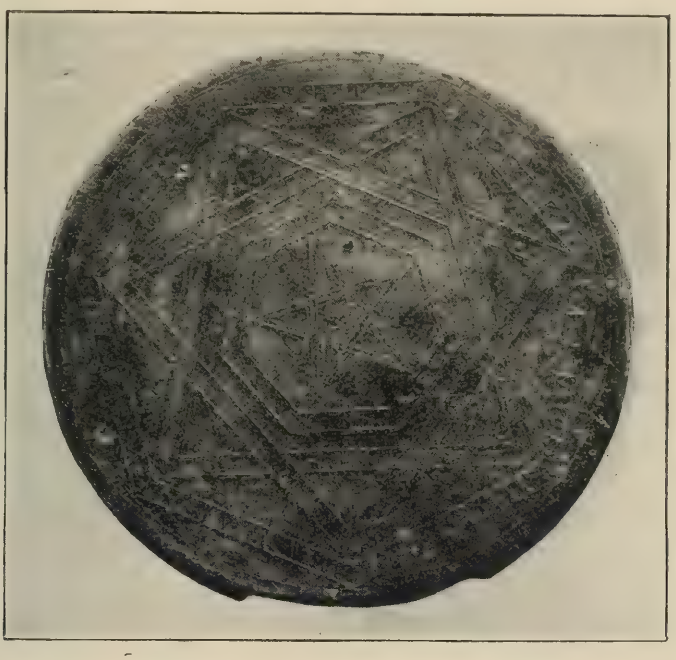


Fig. 146.—Wax disc engraved with magical names and figures; used by Dr. Dee.

writers as Claudius Ptolemy. It moves in the same atmosphere as the magic of the Middle Ages, and it has often been observed that the methods of the magicians in the *Arabian Nights* are quite in harmony with those of their European contemporaries. The magic of the Further East, of India, Tibet, China, and Japan as exercising no direct influence upon that of Europe, must here be left out of account. A few examples of oriental talismans are exhibited in Table-Case A, and attention may be drawn to the Persian and Saracenic magic bowls in Wall-Case 10. In the interiors of these are incised a number of formulae and figures; and it is still believed that water drunk from such a bowl acquires a high medicinal virtue from contact with the inscriptions which it has covered.

The astrological side of magical belief preserved the deepest hold upon the belief of the educated, and persisted through a great part

of the seventeenth century. For though the revival of science which accompanied the Renaissance had dealt the power of magic a severe blow, the practice maintained its influence considerably later not only among the ignorant, but among the educated classes. The three discs of wax in Table-Case **A** (fig. 146) engraved with pentagrams and other geometrical figures, as well as the names of various spirits, are of interest as having belonged to the celebrated Dr. Dee (A.D. 1527–1608), the mathematician and astrologer. It would appear from one of Dr. Dee's manuscript diaries, that these stones were to be used with the table upon which the 'shew-stone', or magic mirror, was placed. Four smaller discs, only two of



Fig. 147.—Amulets of the seventeenth century. That on the left, which is of silver, is for the conjoint influence of Venus and the Moon.

which are in the collection, were put under the legs of the table, and the larger one upon the top of it. The table was then draped with a silk cloth, and the stone placed over the large disc as it lay under the cloth; whether the sphere of quartz exhibited in the same case is the 'shew-stone' itself is less certain. The stone which has the best claim to the title is a flat mirror of obsidian (doubtless of Mexican origin) once in the possession of Horace Walpole; this mirror passed through many hands, and when last sold at auction was bought by Prince Alexis Soltykoff. But it would appear that Dr. Dee used more than one stone, and as some rough marginal notes in his diaries seem to indicate a spherical object, it is possible that the Museum stone may have been the 'Chrystallum' in which many of the visions appeared. All four objects are believed to have come to the Museum, together with some of Dee's diaries, with the Cottonian Library, which had been bequeathed by Sir John Cotton to the nation as early as the year 1700.

Among the inscribed metal amulets in the same case are several European examples of the seventeenth century, a period when the use of astrological amulets was very prevalent. Such objects were carried on the person or deposited in certain spots with the object of bringing good or evil fortune to an individual or a place, and curious examples inscribed with maledictions (like the classical *Dirae*) and dating from the sixteenth to the seventeenth centuries have been found in England at Lincoln's Inn and Richmond (Yorks.). The beliefs which prompted their manufacture are based upon the Kabbala, according to which the Universe consisted of ten concentric spheres, the two outermost those of the *Primum Mobile* and the *Zodiac*, the next eight from Saturn (No. 3) to the Earth (No. 10), those of the planets in their order. Each planet was considered to affect a certain sphere of human activity; and as each had its own genii or spirits, able to confer or withhold definite advantages, it was essential for a man who desired success in life to know the mystic symbols of the planets and the names of their various spirits. Both the planets and the spirits, good or maleficent, had their signs or 'signatures', marks of monogrammatic form, and the planets were also represented by human figures, corresponding more or less to mythological ideas, an armed man representing Mars, a nobleman Jupiter, a female figure Venus. In addition, each planet had its magic square, formed by a series of numbers in equal rows, so arranged that the sum of each row, whether vertical, horizontal, or diagonal, is the same. The sum of all the rows, of the separate rows, and this sum multiplied by the number of the planet, all had their importance and their own mystical names. Thus the number of Saturn being three, each row in his square contains three numbers each making fifteen; Jupiter's number being four, each row in his square contains four numbers adding up to thirty-four; the number of Venus being seven, each row in her square contains seven numbers, adding to one hundred and seventy-five. The numbers are frequently written in Hebrew, and mistakes are not uncommon. Signatures, figures, and magic squares are the staple subjects upon these amulets, with the addition of the names of angels, spirits, and numbers, the names being often inscribed in an outer border. Though as a matter of fact great latitude prevailed, each amulet should really be made of the metal of its own planet, very carefully prepared. Thus for Jupiter the metal should be tin, for Mars iron, for the Sun gold, for Venus copper, for Mercury coagulated quicksilver, and for the Moon silver. Of the seven amulets of this class in the Museum Collection, two have the signature of Jupiter, one that of Mars, and three that of Venus.

MAGIC BOWLS. *See* p. 187.

MATRICES.

Table-Cases C and D.

The *matrix* of a seal is the thick piece of metal or other material in which the design is cut in intaglio: the word seal should, strictly speaking, be confined to the impression made from the matrix, usually in wax, more rarely in thin metal; but it is hardly possible to avoid the use of the word in a wider sense including both matrix and impression. The collection in the Mediaeval Room is composed of matrices accompanied by modern impressions: the Museum collection of ancient impressions is in the Department of Manuscripts. (Selected examples including the Great Seals of English Sovereigns in Table-Cases **L** and **M** in the Manuscript Saloon.)

The most usual metal for the matrix of a seal was bronze, but silver was frequently employed by corporate bodies, while gold was chiefly restricted to princes. Lead was in common use among poor persons; iron or steel was chiefly employed after the Renaissance. About the eleventh century a considerable number of matrices were made of ivory, a material which occasionally reappears in later times (examples from the seventeenth century in Table-Case **D**). Intaglios on precious stones are rare, though a few were made by mediaeval engravers, chiefly, it is supposed, in Italy. Antique Roman intaglios were, however, used to seal documents from Carlovingian times, Charlemagne himself possessing a gem engraved with a Jupiter Serapis: stones of this kind were mounted in finger-rings, and were the earliest seals of all. The commonest forms of mediaeval matrices are the circle and the pointed oval. From the twelfth century to the Renaissance the Church usually employed the pointed oval, after the sixteenth century the oval form.

The most ancient mediaeval matrices are those of Frankish times. The Carlovingian emperors and kings in the ninth and tenth centuries sealed with gems bearing their own busts, the style being probably suggested by Roman coin-types. Only one of these matrices now survives, a crystal intaglio of Lothair II, King of Lorraine (d. 869), mounted in a reliquary-cross in the treasury of the Cathedral of Aix-la-Chapelle; but impressions of several others are to be seen upon documents. The Anglo-Saxon kings made a less extensive use of seals for state purposes, but impressions in the French National Archives upon two Charters of Offa, King of Mercia (A.D. 790), and Eadgar (A.D. 960), show that our early kings were possessed of matrices engraved with their portraits as early as the close of the eighth century. Æthelwulf of Wessex also used a seal in the year A.D. 857. The Museum is fortunate in possessing the leaden bulla of Cœnwulf

King of Mercia (about A.D. 800–810), as well as three matrices belonging to non-royal persons, which date from the period before



FIG. 148.—Matrices of seals. At top, Joanna, daughter of Henry II of England. At bottom, Robert Fitzwalter (on the left), John Holland, second Earl of Huntingdon, Admiral of England, Ireland, and Aquitaine, 1435–1442. In the middle, Black Canons' Priory of St. Denis, Southampton. (See p. 37.)

the Conquest. These are the brass or bronze matrix of the seal of Æthilwald, Bishop of Dunwich (about A.D. 850); that of Ælfric, Alderman of Hampshire (about A.D. 985), in the same

material; and the fine eleventh-century ivory matrix of the thane Godwin. All of these are exhibited in the Anglo-Saxon Room (Table-Case **H**). The use of seals became general in the twelfth century.

Any adequate classification of seals would be needlessly intricate for the purposes of the general reader. They may be roughly divided into two main classes—Ecclesiastical and Secular. Subdivisions of the former class are seals of persons holding ecclesiastical offices (popes, bishops, abbots, deans), and common seals of corporate bodies (chapters, religious colleges, monasteries, &c.). The principal classes of secular seals are those of kings and officials, of courts of law, corporate bodies (towns, universities, guilds, hospitals, schools), and of private persons.

Most seals have a surrounding legend, consisting either of the name and titles of the person or corporation, or of some motto. The designs themselves are naturally determined by the position of the owner. Thus royal seals, which in England begin with Edward the Confessor (impressions in the Manuscript Saloon, Table-Case **C**), generally have on the obverse the monarch seated on the throne, and on the reverse the monarch armed and mounted. Seals of bishops usually have the effigy of the bishop; those of admirals a ship. Seals of religious corporations have sacred subjects, such as the Crucifixion, Annunciation, Coronation of the Virgin, or the Trinity, some of them introducing a view of their church, like the remarkable matrix of Boxgrave Priory in Table-Case **D**. Seals of towns, which had common seals from the beginning of their corporate existence, usually show a view of the town walls or of some conspicuous building such as the castle or cathedral. This is the case with the earliest English municipal seal, that of Exeter, dating from about 1180. See also the early German municipal seals in Table-Case **C**.

Upon secular examples the devices are figures of the owners (mounted knights, ladies standing erect, as in fig. 148); animals, monsters, and birds (lions, dragons, eagles), and floral and other devices (fleurs-de-lys, crescents, stars, &c.). At the close of the twelfth century heraldic devices were introduced, and henceforward used by all entitled to bear arms. The middle classes, who were not so entitled, used motives similar to those already described, as well as rebuses, grotesque and satirical devices, and signs and symbols of crafts. The legends are usually in Latin or the vernacular of the several countries. In England English is used from the fourteenth century, though Latin and French continued to predominate. The characters on English seals are Lombardic (see p. 182) down to about A.D. 1350; and black-letter from this time until the Renaissance. Seals preserve the same general character throughout the whole period between A.D. 1200 and the Renaissance, though they differ very widely in detail. The character of the de-

signs changed with the progressive evolution of the Gothic styles, and following the development of monumental sculpture, especially in the canopies and traceries which accompany the figures ; and the designs themselves naturally afford valuable indications of the successive changes in ecclesiastical, military, and civil costume. It may be noted that after the end of the fourteenth century no ladies other than queens are represented upon seals. The forms used throughout the period are chiefly the pointed oval and the round.

The official seals of kings and persons holding high civil or



FIG. 149.—Matrices of seals. At the bottom, seal for the delivery of wool and hides at Winchester, reign of Edward I. At top, seal of the Weavers' Company (on the left), Customs Seal for the port of Carmarthen, *temp.* Edward I or Edward II (in the middle), seal for labourers' passes, Hundred of Wangford, co. Suffolk (on the right, see p. 195).

religious office, if not buried with the owner, were commonly broken or rendered useless at his death. Thus the seals of deceased abbots and bishops were sometimes broken in presence of the chapter, or before the altar after High Mass. The seal of William de Toucy, Bishop of Auxerre (d. A.D. 1182), was broken with an axe and buried with him. Seals might also be broken at times of revolution. Thus the people of the Low Countries, on renouncing their allegiance to Philip II of Spain, broke his seal.

Seals of municipal bodies were not exposed to such dangers, and the splendid series of matrices belonging to English corporations, though sadly diminished from other causes, begins with the close of the twelfth century. As from the twelfth to the fifteenth century inclusive it was generally the seal which gave validity to an act, it is obvious that the wrongful retention of a matrix might lead to grave abuse. This was actually the case after the death of Henri IV of France, when, as Sully relates in his *Memoirs*, the Chancellor kept the Great Seal and issued false letters patent for a period of five years, the King's signature not being required when the Great Seal was used. The Chancellor was usually responsible for the Great Seal, and carried it about with him: when the Chancellor of Richard I of England was drowned in the Mediterranean he was carrying the royal seal suspended from his neck. In the chapters and abbeys it was likewise the Chancellor of the house who kept the matrix, though sometimes it was locked in a case with as many as five separate keys. In days when writing was not a universal accomplishment, the custody of the matrix was a matter of the greatest importance, and its loss was a serious matter. In case of loss the owner usually made a public declaration cancelling the old seal, afterwards issuing a second announcement describing the new matrix adopted. A similar course was followed if a matrix became too worn for further use, or if a man grew tired of it and wished for a change; or again, if he rose in the world or changed his office. Thus a squire becoming a knight would change his seal; so would a bishop on removing from one diocese to another. Monastic and cathedral seals were renewed when worn out, or perhaps when there was a change in artistic taste: they rarely belong to the date of the original foundation.

Down to the beginning of the eleventh century seals were usually applied direct to the face of the parchment; but after that time the practice of appending them to the document upon strips of parchment or cords came into vogue, and by the twelfth century was universal. This custom is illustrated by numerous examples of charters exhibited in the Manuscript Saloon (Cases V and VI). By this custom a second surface was made available, and a second seal, called the counter-seal, was now used. This has commonly no obvious connexion with the other; but as the second surface permitted the amplification of the subject or legend upon the first, advantage was frequently taken of this opportunity. Where the seal and counter-seal were of the same size, the matrices were provided with loops in which pegs were fixed, in order that the two matrices should fit exactly one over the other. The *secretum*, or private seal, could be employed on occasion as a counter-seal, but was also used alone for private correspondence, for which the larger baronial or knightly seal was not necessary. A large class

of intaglio gems both ancient and mediaeval were used as private seals, appropriate legends (*secreta tego, secretum servare volo*, &c.) being engraved upon the metal borders of their settings (examples in Table-Case D, fig. 150): after A.D. 1200 the use of the *secretum* was common among barons and knights. Secondary seals became a necessity as correspondence and business increased; for, as already noted, the important official seals of religious and other corporate bodies were often kept under several locks, of which different persons had the keys; moreover the presence of numerous witnesses was essential to the attestation of the deed on which it was used. In some towns all the burgesses were summoned to witness the apposition of the municipal seal. This procedure was too cumbrous for everyday affairs,



FIG. 150.—Intaglio gems mounted in silver and used as seals, thirteenth and fourteenth centuries. The gem on the left is mediaeval and probably cut in Italy, the other two are antique.

and for this reason monasteries and other bodies provided themselves with lesser seals, *ad causas*, i. e. for current business: many of these are to be seen in the collection.

Attention may here be drawn to the seals used for the customs, and for the delivery of wool and hides, which are interesting in connexion with mediaeval commerce and administration (Table-Case D, fig. 149): also to the group of rough, unpretentious seals used to authenticate labourers' passes under the Statute of Cambridge of the year A. D. 1388. During the period preceding the rising under Wat Tyler numbers of villeins and serfs had begun to leave their homes in the country in order to obtain freedom by residence of a year and a day in the towns. This led to a great scarcity of labour; while many of these men became vagrants and robbers, to the public danger. The Statute provided that all persons changing their abode must produce passes sealed with a seal giving the name of the county, hundred, rape or wapentake in which they lived. The matrices in the Table-Case D (fig. 149) are examples of those used in sealing these passes.

The art of engraving matrices reached its highest point at the close of the thirteenth and during the fourteenth century; from the first half of the fifteenth century the work declines in quality. Many English seals have survived from the best period, which excel any contemporary work upon the continent; especially those of religious foundations, and the fine quality of this branch of the glyptic art makes it all the more probable that the small number of contemporary carved ivories which have been preserved does not fairly represent the capacity of English workmen. It would be difficult to imagine a finer seal than that of Merton Priory in the thirteenth century (Manuscript Saloon, Table-Case **M**). With the Renaissance, seal-engraving underwent the change which affected all the arts. The figures are treated in a freer style; architecture, if introduced, is classical or classicizing, and inscriptions are in the Roman character. But the art did not maintain the relatively high position which it had enjoyed in the Middle Ages, and as time advanced matrices were more often characterized by mechanical finish than by real artistic distinction. It is impossible to go into details with regard to these later seals, good specimens of which may be seen in Table-Cases **C** and **D**, especially among the Italian examples. We may notice that signet-rings, which had been used in the earlier period, became very popular from the sixteenth century, when armorial signets of massive gold were frequent (examples in Franks Bequest in Passage of the Gold Ornament Room). The revolving three-sided fob-seals engraved on steel, came into use in the early eighteenth century.

Mediaeval matrices are usually provided with a pierced loop at the back, by which they were suspended: the smaller matrices often have a handle terminating in an openwork trefoil. Sockets for the insertion of a handle made of different material did not come into use until the Renaissance. In some examples of very elaborate design several matrices were required to make a single impression, as in the case of the seals of Southwick Priory and of the monastery of Boxgrave in Sussex, the latter of which is exhibited (Table-Case **D**).

Criminal records show that false matrices were made in the Middle Ages. In A.D. 1356 the Chevalier Bouchard de Poissy was banished from Paris and fined 4,000 livres for forging a seal. Supposing the originals to have been lost, it would be impossible for us now to distinguish such ancient falsifications, if they were engraved and not cast. Modern forgeries or reproductions, which are very numerous, can usually be detected by the quality of the surface, and by the want of precision in the sunk device. Such imitations are not cut in intaglio, as were the originals, but cast from impressions; and as many of these are exceedingly worn, there often results an almost total lack of detail. In a forged matrix, the deepest part of the intaglio, which in the original is

most protected from abrasion, shows the least detail, because in the impression, from which the mould has been taken, this part is in the highest relief and therefore most worn. Where it is possible to compare a forgery with the genuine old impression from which its mould is taken, it will be found that the latter will not fit into the supposed matrix. The reason of this is that the cast metal contracts on cooling: the real matrix, not having been subjected to heat, is necessarily larger than its impression.

Questions concerning the material used for impressions do not directly concern the collection of matrices, but a few facts with regard to it may be conveniently mentioned. Every effort was made to produce a durable wax, for the whole fortune of a family or corporation might depend upon the seal: if it were lost or badly mutilated, the title to estates might lapse or pass into new hands. The legal advisers of St. Louis on one occasion pointed out to him that he was perfectly justified in resuming possession of a domain, because the seal upon the document by which it had been granted to the heirs of the Countess of Boulogne was broken and imperfect. The king refused to take advantage of the occurrence, and the fact is noted as a proof of exceptional nobility of character. To increase the durability of the wax, fine hairs or threads were sometimes mixed with it, and the surface of the seal was covered with a hard varnish. Seals were often sewn up in little bags or placed in capsules of wax; from the fifteenth century cases or boxes of white metal were used to enclose them. Down to the twelfth century colourless wax was most often used; then red and green were introduced, the latter not till the close of the century: other colours which came into use were yellow, brown, black, and, more rarely, blue. Individuals used colours indifferently, but chancelleries and corporate bodies often adhered to a single colour.

The word *bulla*, or bull, is confined to impressions made not in wax but in metal. Lead was the most frequent metal, and has generally been used by the popes; but gold was frequently employed by princes. A gold bulla of Edmund, second son of Henry III, as King of Sicily, is in the Gold Ornament Room (Case **W**); while in the Manuscript Saloon are exhibited gold bulls of Baldwin de Courtenay, Emperor of the East (dethroned A.D. 1261), and of the Emperor Frederick III. In the same saloon is a bull of Pope Innocent III in lead (Cases V and VI). Instruments said to have been used for making bulls of Paul II and Pius II are exhibited in Table-Case **C** of the Mediaeval Room.

MAZERS.

GOLD ORNAMENT ROOM, CASE S. FRANKS BEQUEST.

Among examples of old English plate mazers are of conspicuous interest (figs. 49 and 151). These are shallow drinking-cups usually made of the spotted or 'bird's-eye' maple, whence the name, which is of German origin and signifies a spot; they are not to be confounded with the ordinary wooden or 'treen' cups which were in general use during the Middle Ages, the commoner sorts being of beech. Mazers represented the best class of wooden cup, and as such were deemed worthy of the metal mounts which bring them

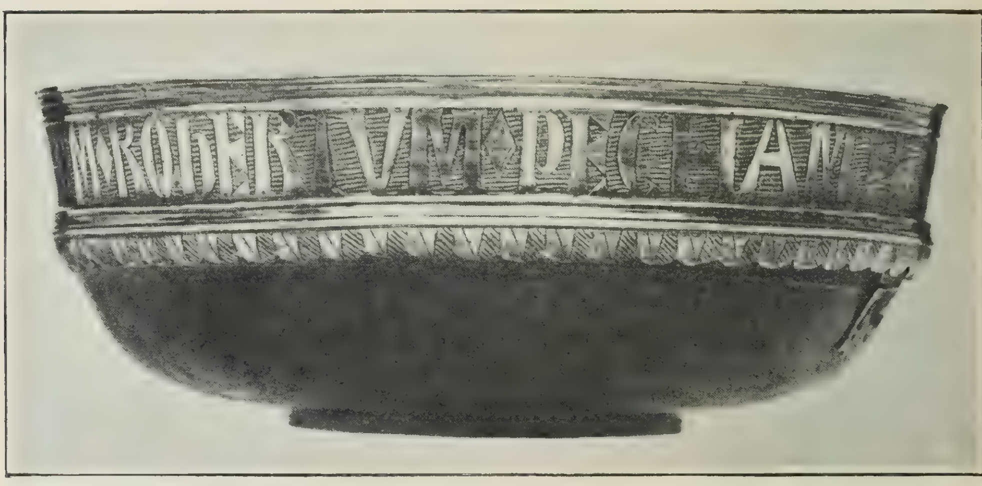


FIG. 151.—The Rochester mazer with name of Robert Peacham and London date-letter for 1532-3.

within the category of silver plate. They are without handles, and have round the rim an ornamental silver (rarely gold or copper) band almost always with an inscription, a low or high metal foot, and a metal boss in the centre commonly known as the 'print'; in late examples the band and foot are sometimes connected by vertical bands, known as straps, which may also bear inscriptions. Many mazers had covers, though few are now in existence; the cover was surmounted with a handle or knop of precious metal, and had a metal rim. The Franks Bequest contains two covered mazers, one Flemish of the fifteenth century, the other of the sixteenth century and German. Mazers were in use from the thirteenth to the sixteenth centuries, and were especially common in England, where some monasteries (as at Durham) had one for every brother, with larger examples for general use, often bearing special names after the mediaeval fashion. Thus at

Canterbury in A.D. 1328 there were mazers called 'Austyn' and 'Pylegrym', and at Battle in 1437 one named 'Fenix'. The print usually has a silver plate engraved or enamelled with some device, often, but not always, religious. The inscriptions, which are in Latin, French, or English, may be either religious or convivial, a good example of a convivial inscription being this, of about 1420:—

> Hold yowre tunge and sey the best
> And let yowre neybore sitte in rest,
> Hoeso lustythe God to plese
> Let hys neybore lyve in ese.

Other mazers have the name of the Society to which they were given and the donor's name: thus one of the mazers in the Franks Bequest (fig. 151, Gold Ornament Room, Case S), which has the London date-letter for 1532–1533, has on the band in Latin: 'Cup of the Rochester refectory, (given) by brother Robert Pecham.' Only some fifty mazers now survive. Those of the fourteenth and early fifteenth centuries have rather deep bowls, with plain narrow bands, and of these about a dozen remain. From about 1450 to about 1550 the bowls are shallow, and the bands often broad, in order to increase the capacity of the cup. Of this period at least twenty-six are now in existence. Elizabethan mazers have straps, but examples of this kind are even rarer than the others. Inscriptions are in black-letter down to the end of the fifteenth century: at the beginning of the sixteenth century a peculiar form of capitals is substituted, as in the example shown in fig. 49.

Covered cups, usually of wood, in form resembling mazers, but with handles, and dating from the fifteenth century, were probably for the most part made in Germany and Switzerland, though some may be English. Sometimes they were entirely of metal, as the fine cup from the Hamilton Collection now in the Franks Bequest; this, however, now has no cover.

MERCHANTS' MARKS.

These are devices of a monogrammatic character usually composed of a private cipher with the initials of the owner's name: the brass, fig. 72, and the ring, fig. 152, will give an idea of their appearance. The almost invariable appearance of the cross in these marks has been explained by several conjectures. According to one, Christian merchants trading in the East and the Levant required some obvious sign to distinguish their bales from those of Mahommedan merchants. Another supposes that the cross was used to thwart the

demons by which tempests were held to be incited. A third connects the cross with the symbol of St. John the Baptist, patron-saint of the wool-merchants by whom so many of these marks were used. Merchants' marks, which are frequently engraved on rings, were commonest from the fourteenth to the sixteenth centuries; and English merchants probably first borrowed them from the Flemings. Though for the most part used by persons not entitled to bear arms, they were also employed by others, and are seen, for example, side by side with arms on sepulchral monuments of the fifteenth century. The tomb of William Canynge, the famous merchant, in St. Mary Redcliffe, Bristol, shows both the arms and the mark of the deceased. Marks of the same kind were used by printers from about 1470 to 1520, and the more complex examples with initials chiefly belong to the sixteenth century.

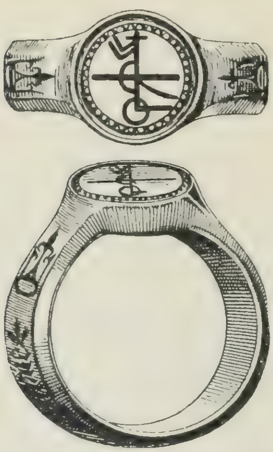


FIG. 152.—Gold ring with merchant's mark, sixteenth century.

METAL-WORK.

It is of course impossible in a Guide of this kind to do more than indicate some of the more interesting classes of the smaller mediaeval objects in metal. Nor can any attempt be made to deal with the Italian and other bronzes of the Renaissance; these are hardly represented in the collection except by plaquettes, which are separately described (**Plaquettes**). Jewellery, enamels, niello, sepulchral brasses, secular plate, matrices of seals, pewter, domestic utensils, are also noticed under separate headings, while church plate and other objects used for ritual purposes are individually noticed (see **Chalices, Ciboria**, &c.).

The most numerous examples of fine mediaeval metal-work come, as was to be expected, from churches, where they were more carefully preserved than objects made for purely secular purposes. These were exposed to more inevitable dangers, more easily lost, and often subjected to harder usage; moreover, when worn out they were thrown away, or if made of precious metal or of useful material like good bronze, melted down to be recast in another form. The following remarks have more especial reference to the general changes of style in different centuries and countries.

Of work older than the ninth century very little now remains. The votive crowns of Guarrazar in Paris and Madrid, the crosses and other objects in the treasury of Monza Cathedral, reveal the capabilities of the Teutonic conquerors of Italy and Spain.

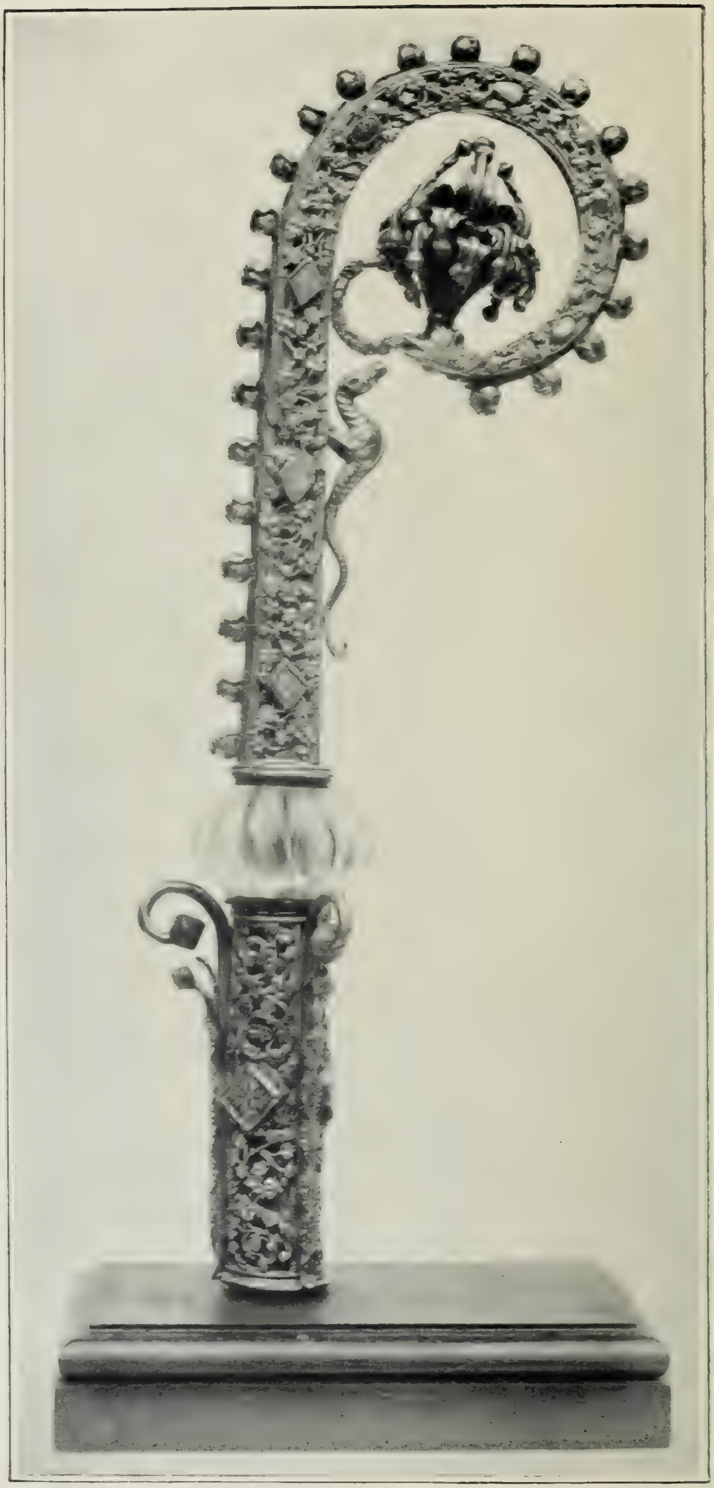


PLATE XI. CROZIER MADE BY FRÈRE HUGO, EARLY THIRTEENTH CENTURY.

[See p. 9

The Merovingians expended vast sums on jewellery and plate, and the chronicles tell of the wonderful crosses and shrines made by St. Éloi in the reigns of Clotair II and Dagobert I, but of their church ornaments and utensils we know only the gold chalice and paten of Gourdon, now in the National Library at Paris, which are enriched in the barbaric manner with inlaid garnets and pastes. Under the Carlovingian revival which affected Italy as well as the North of Europe, the old love of splendour was retained, but the barbaric style was modified by the introduction of motives and designs adapted from classical art. The representation of the human figure became common, and altars were covered with frontals of silver embossed with figure-subjects, an example of which has survived in the Church of St. Ambrose at Milan. The enrichment of metal-work in this period was chiefly by means of applied filigree scrolls interspersed with *cabochon* stones or pastes, often raised above the surface to give scope to the play of light: enamels also began to be regularly used (see p. 114). The most conspicuous examples of such work which have come down to us from this period are covers for books of the Gospels, fine examples of which are in the National Library in Paris: the chief centres of their production were the great monasteries in the north of the Frankish dominions and on the Rhine. At the end of the tenth century the Rhine valley became the centre of a great artistic movement which originated under the Ottos, and was to a certain extent affected by Byzantine influence, though in the designing and embellishment of church furniture native genius soon introduced original forms of decoration. Contemporary architecture now began to exert upon the minor arts that influence which became so predominant in the later Middle Ages; and in ornament the classical acanthus so popular with the Franks (see borders of ivory-carvings in Wall-Case 35) was replaced by more realistic foliage often derived from local flora. Of the quality and splendour of the work of this time when Egbert, a munificent patron of the arts, was Archbishop of Trèves, some idea may be formed from the portable altars, book-covers, and other objects still preserved at Trèves and Aix-la-Chapelle. The book-cover from Echternach, now at Gotha, which belongs to the School of Trèves, has in addition to its enamels, embossed figures of the Evangelists, the Emperor Otto, and the Empress Theophano, which will bear comparison with the finest work of later centuries.

In the eleventh century this supremacy of German art was continued, and the treasuries of the Rhenish churches were filled with sumptuous gifts, especially by the Emperor Henry II (1002–1024). Fine works of art passed at the same time into the treasuries of Liège, Tournai, Gembloux, and Stavelot in Belgium. Bishop Bernward of Hildesheim (d. 1022) was both caster in bronze and goldsmith, and works of his time are

still in existence at that place. The treatise of the Monk Theophilus on the technical processes used of the industrial arts, shows that in the twelfth century the same artist was expected to model, chase, engrave, emboss, and work in enamel and niello.

In the first half of the twelfth century, the adoption both on the Rhine and Meuse, and at Limoges in Central France, of the *champlevé* method of enamelling (see p. 116), began to modify the character of ecclesiastical metal-work. As it was now possible to decorate large panels of copper with enamelled figures of considerable size, the scale of objects tended to increase. Moulded crestings of gilt copper were employed, and in the northern area are of admirable design ; while on borders the little panels of *cloisonné* enamel on gold, which had in the earlier period so frequently alternated with panels of filigree and cabochon stones, were replaced by continuous enamelled bands on copper. Where, as was the case upon the Rhine, filigree was retained, it was subordinated to the other features of the ornamentation. Of the objects which were now decorated with enamel, reliquaries, candlesticks, pyxes, ciboria, &c., the first-mentioned are the most conspicuous : both at Limoges and in the North they end by reproducing the form of a church building, usually with gable ends and sometimes with transepts. Examples of such Limoges reliquaries are in Wall-Cases 27–29 and No. 19 of the Waddesdon Bequest.

The figures upon such enamels were often reserved in the metal, with their details engraved ; but frequently the head only, sometimes the whole body was separately made and applied ; the bodies at Limoges being really longitudinal sections hollow at the back. In the Rhenish area, figures, when not enamelled or reserved on an enamelled ground, are usually embossed in silver in very high relief. It is not to be supposed, however, that all metal-work was enamelled at this period : sometimes flat surfaces were engraved with figures in outline in a bold and free style, while the bases of candelabra and other objects are cast in openwork with the human figures, monsters, and animals involved in foliage which were such favourite subjects in Romanesque art.

Champlevé enamelling continued to form a characteristic embellishment of metal-work during the thirteenth and fourteenth centuries, lasting longest in the South of France, where changes were less rapid than in the North. But the rapid development of the Gothic style in architecture in the thirteenth century soon effected a revolution in the designs of metal-workers. Pointed arches, traceries, pinnacles, mouldings, crenelations, and other features were now reproduced in bronze, changing with all the successive modifications of the style, with the result that the extensive plane surfaces hitherto available for enamelling were much circumscribed. Where enamel was used, the translucent variety on sunk relief (see p. 109) was preferred, but reliance was now

placed on architectural form rather than upon brilliant colour effects relieving a simple design. In the fourteenth century,



Fig. 153.—Bronze ewer in form of a mounted knight, English, about 1300 (see p. 9).

especially at its close, when France enjoyed some years of peace, the royal inventories reveal an enormous wealth of ornaments and plate. Paris at this period was evidently a principal seat of the goldsmiths and artistic workers in metal, though after the troubled times which succeeded, it was for a time displaced by Tours. But the wars with England placed the French at a disadvantage with regard to Burgundy and Flanders, which had enjoyed greater immunity from external attack; and these countries, now greatly enriched by commerce, attained to the artistic supremacy of Northern Europe.

At the time when the Dukes of Burgundy were wealthy and powerful sovereigns, they were patrons of the goldsmiths in the Low Countries, and many splendid ornaments were made for Charles the Bold by Gerard Loyet of Lille and Henri de Backer of Brussels: the crown of Margaret of York at Aix-la-Chapelle is probably the work of a Burgundian Court Goldsmith. The close of the fifteenth century witnessed the decay of the Gothic style in Europe: the work of this period, though delicate and perfect in detail, lacks elegance and simplicity, and the imitation of architectural forms is pushed to excess. The commanding position of France and North Germany with regard to the development of the finer forms of artistic metal-work is evident from the above remarks. In what follows the position of other countries may be briefly indicated.

In Italy during the Romanesque period Byzantine influence was powerful in many parts of the country; interesting book-covers in the treasury of Vercelli Cathedral show examples of busts in series of medallions, and scroll-work of Byzantine character: even Byzantine enamels are imitated. But with the thirteenth century Gothic influences came in from beyond the Alps, and Italian silversmiths began to frame their figure-subjects in Gothic architecture. Sculpture had revived under the inspiration of the Pisan school, and from the first exerted a continuous influence upon the art of the silversmiths. Some of their most celebrated works took the form of altar-frontals and retables divided into panels embossed with scriptural scenes; and as almost every artist of note commenced his career in the goldsmiths' workshops (among others Brunelleschi, Caradosso, Ghiberti, Ghirlandaio, Francia, Luca della Robbia, and Pollaiuolo), much of the work in silver rises to the level of great sculpture. There is fortunately abundant documentary evidence with regard to many masterpieces which have survived: special mention may be made of the altar frontal and retable of St. James at Pistoia covered with reliefs and single figures by Pistoian and Florentine artists working in the thirteenth and fourteenth centuries; and of the later silver altar originally made for the Baptistery at Florence, but now in the Opera del Duomo, in the decoration of which Verroc-

chio, Antonio Pollaiuolo, and Michelozzo each took part. Studied in relation to earlier silver frontals such as the paliotto of Sant' Ambrogio (see p. 114) and that of the twelfth century at Città di Castello, these works illustrate the development of sculpture in the precious metals from the early Middle Ages to the Renaissance; and the Pistoia work, enriched as it is with translucent enamels (see p. 122), admirably shows the manner in which Italian silversmiths employed small enamelled panels to lend warmth and colour to the whole effect. The architectural framing of the Byzantine enamels on the Pala d'Oro in St. Mark's at Venice (see p. 115) is Italian work by Buoninsegna of Siena (A. D. 1345). Two famous reliquaries, one made by Ugolino of Siena and his associates in A. D. 1338 for the Cathedral of Orvieto, where it still is, and the other by the same artist for the head of St. Juvenal, preserved in the Opera del Duomo of the same city, are characteristic of the fine Italian ecclesiastical silversmiths' work in the fourteenth century. Each is a Gothic structure enamelled and ornamented with sculpture, but the second is far the more graceful in design, though the first is more profusely decorated with enamelled panels.

From the close of the thirteenth to the close of the fifteenth century typical Italian mediaeval chalices (a fair example in Wall-Case 30, and plate VI) were made in great numbers in Tuscany—especially at Siena. These chalices, which are to be seen in most large museums, have lobed feet usually ornamented with embossed foliage, upon which are fixed enamelled silver medallions with busts of saints and apostles or other sacred subjects: similar enamels adorn the large knop, while the deep, narrow cup is fixed in a kind of calix at the top of the short polygonal stem. The name of the maker is commonly found on a band at the base of the stem, the artist who made the Museum example being GHORO DI SER NEROCCIO, various examples of whose work are preserved in Italy. Another large class of Italian mediaeval work is formed by processional crosses and altar crosses produced in the fourteenth and fifteenth centuries. These are of wood, the arms terminating in quatrefoil medallions adorned with metal or crystal balls or enamelled fruits. They are covered with plates of silver stamped with conventional designs, and to the medallions are applied figures and groups in relief—the Evangelists with their symbols, the Virgin, St. John, the Resurrection or the Entombment: the crucified figure is, of course, always applied in relief. The upper part of the fine cross in the Opera del Duomo at Florence, completed in 1459, adheres in the main to this traditional type, though the part of the base by Pollaiuolo, is in the best style of the Renaissance. This cross deserves especial notice as an illustration of the manner in which the old and new styles occur simultaneously in Italian religious design of the fifteenth century.

The niello work of that century, produced very largely in Florence, has been mentioned in another place (see p. 215).

From this brief summary it will be gathered that the silversmiths of mediaeval Italy were largely influenced first by the Byzantine Empire, afterwards by the countries in which Gothic art was first developed, notably by France: it has been argued that even the process of enamelling upon sunk relief (see p. 109) which Italian silversmiths employed with such effect, was originally of French introduction. This northern influence was naturally most powerful in the North and in Tuscany, the South of Italy, though learning much from the French monastic orders, remaining until the fifteenth century still under Byzantine influence; in Sicily the three currents of Byzantine, Saracenic, and Western art were for a long time blended together. Venice occupied a peculiar position, for her protracted relations with Constantinople led to the frequent importation of Byzantine work. This did not, however, exclude Western and Northern influence; even as early as the fourteenth century a German influence, marked by a tendency to realism, is clearly perceptible. Fine examples of mediaeval Venetian work are to be seen in the Treasury of St. Mark's, for many objects of Byzantine origin damaged by fire in the thirteenth century, were furnished with new mounts by local goldsmiths. With the Renaissance Italy became supreme, her great sculptors worked freely in bronze, and the developments of classical design which she now produced obtained currency through the whole of Europe.



Fig. 154.—Bronze statuette of a lady and her dog, fourteenth century.

Germany and Central Europe in the thirteenth and fourteenth centuries were naturally influenced by the vigorous art of France and Flanders. But the war between France and England, by diverting the commercial route between Italy and the Low Countries from the Valley of the Rhone to those of the Inn and the Rhine, brought great wealth to the South German cities; and from the fifteenth century Augsburg and Nuremberg became

famous for their goldsmiths, whose most characteristic work, however, consists of plate for secular use (see p. 237).

England, which in earlier Anglo-Saxon times had produced jewellery and metal-work akin to that of the Teutonic tribes of the Continent (see Anglo-Saxon Room), was in the ninth century affected by the artistic results of the Carlovingian Renaissance, to which her own culture had originally contributed. Between this period and the introduction by the Normans of the Romanesque



FIG. 155.—Bronze mould for casting statuettes of the Virgin and Child, Flemish, sixteenth century. (Table-Case B.)

style, she developed her arts, especially that of illuminating manuscripts, to a high degree of excellence. A few examples of early English metal-work have been preserved: the portable altar of St. Cuthbert at Durham is covered with embossed silver plates; while the top of a bronze censer found at Evesham, and in form resembling the Saxon spire and tower of Sompting Church, is

inscribed with the words 'Godric me wvorht' ('Godric made me') and is of the tenth century.

During the Norman and Plantagenet period our country no doubt imported the reliquaries, candlesticks, and pyxes of Limoges in large numbers, probably producing few enamels of her own (see p. 120). The famous Gloucester candlestick, however, now in the Victoria and Albert Museum, is enough in itself to show that work of admirable quality was done in England, and the continuance of a high standard of excellence in casting bronze is shown not only by the mediaeval bells, but by such fine ewers of the fourteenth century as that exhibited in Wall-Case 11 (fig. 185). But at the Reformation enormous quantities of mediaeval church plate were melted down and destroyed, until little remained to illustrate the work of England before the Reformation. The Museum is fortunate in the possession of a plain silver chalice of the thirteenth century from the Church of Berwick St. James, Wiltshire (Wall-Case 30 and plate VI), an example of the greatest rarity. The scantiness of the work which remains is all the more to be regretted because there is historical evidence to show that English goldsmiths enjoyed a high reputation. Passing over the references to the period preceding the Conquest, we may note the name of Wulfuin *aurifaber* of Chichester in the eleventh century, and the existence in the following century of a goldsmith's workshop at St. Albans Abbey, where lived the monk Anketill, styled *aurifaber incomparabilis.* He and his pupil Solomon of Ely made a great silver-gilt reliquary, set with gems, of which Matthew Paris speaks. The inventory of Salisbury, drawn up in 1214, speaks of crosses, book-covers, and other objects of sumptuous workmanship. About the same time Walter of Colchester, a monk of St. Albans, who is also mentioned by Matthew Paris, made a statuette of the Virgin and two Gospel-covers, as well as altar-frontals with subjects in relief; most of his work was earlier than A. D. 1235, in which year his patron, Abbot William, died. Richard II ordered a magnificent tomb from two goldsmiths of Wood Street, who cast and gilded statues of the queen and of himself. Talented silversmiths must have worked for William of Wykeham, as is shown by his beautiful crozier and other objects preserved at New College, Oxford. These references, incomplete as they are, alone suffice to prove that the goldsmith's art flourished in our country throughout the Middle Ages.

Spain in the Middle Ages was affected by two distinct influences, that from France and Flanders in the North, and that from the Moorish territory in the South and East. From the thirteenth century guilds of goldsmiths were established, but speaking generally silversmiths' work and Church ornaments dating from before the close of the Middle Ages are very rare. Several causes have contributed to this result, of which two may

be specially mentioned. The wealth drawn from the Spanish colonies in the New World introduced a preference for a profuse and sumptuous style, leading to the destruction of early work as no longer suited to the popular taste; while at the period of the French occupation great quantities of Church plate were destroyed. The reliquary of Alfonso III and his queen (A.D. 866–896) is covered with silver plates embossed with the symbols of the Evangelists; a chalice of the eleventh century is in the church of Silos, others of the thirteenth or early fourteenth century are preserved in the Cathedrals of Santiago and Toledo; while a splendid example of about 1380 formerly in the Cathedral of Seville, but now in the Louvre at Paris, is richly adorned with translucent enamels recalling the finest Flemish work. Early processional crosses also exist in various places ornamented with champlevé enamels imitating the style of Limoges. The most conspicuous objects of ecclesiastical metal-work are the *custodias* or monstrances, many of which are of the most ornate character and of Gothic architectural design, covered with pinnacles, arches, columns, statuettes and reliefs. Fine examples made by the famous silversmith Enrique Arfe in the first quarter of the sixteenth century are still in the Cathedrals of Cordova and Toledo; and that in the Cathedral of Jativa was presented by Pope Alexander VI, who was a native of that place. Monstrances of a smaller and simpler type dating from the fifteenth century clearly show the influence of Flemish art. The chalices of the sixteenth and seventeenth centuries are also of a sumptuous character, and many of these show a mixture of Gothic and Renaissance motives very characteristic of the ecclesiastical art of the Peninsula at this period. Paxes and processional crosses are also numerous. The crosses of the sixteenth century are profusely decorated with canopies, edgings and pendants in a semi-Gothic style, the whole from a little distance producing the effect of lace. What is known as the *Mudejar* style, which combines



FIG. 156.—Bronze relief, Anne of Brittany. (See p. 9.)

the motives of Christian and Moorish art, is more conspicuous in work upon a larger and more monumental scale; but the Saracenic influence continued to be manifested in details—for instance, enamels clearly derived from oriental models in the style of those decorating the swords of Boabdil (see p. 116) are found upon a sixteenth-century chalice in the Cathedral of Seville.

In Portugal from the close of the fifteenth century the development of Gothic motives was even more extravagant than in Spain, the silversmiths imitating the fantastic style adopted by Portuguese architects in the reign of Don Manuel (A.D. 1495–1521). The monstrance of Belem, made from gold brought from the East by Vasco di Gama, is an example of such work.

The British Museum is poor in works of Spanish art: the Victoria and Albert Museum however possesses a good representative series, which gives an excellent idea of their luxuriant and florid style.

Byzantine ecclesiastical metal-work is not merely known to us from the descriptions of chroniclers and historians which give accounts of the sumptuous decoration of many churches from the time of Justinian (sixth century) onwards. Many objects are still preserved in various European treasuries which were enriched by the spoils of the sack of Constantinople in A.D. 1204. Early Byzantine silver plate of the sixth century is shown in the Christian Room; and a fine paten with inscriptions, perhaps of the eleventh century, is in the Cathedral of Halberstadt in Germany. But the principal source of our knowledge is the Treasury of St. Mark's at Venice, where there are no less than thirty-two chalices and several patens, many of which have original metal mounts, though the vessels themselves are rarely of metal. Book-covers and flat, slab-shaped reliquaries for wood of the true Cross exist in fair numbers; they are usually of wood covered with thin plates of silver-gilt on which figures and scroll and foliage designs are executed in *repoussé* work, and occasionally with filigree. The borders and ground are enriched with *cabochon* stones in raised settings with numerous small panels and medallions of *cloisonné* enamel, the latter often bordered with pearls. The mounts of several of the chalices at Venice are thus ornamented with stones and small circular medallions often framed in pearls. Byzantine churches were rich in bronze lamps, the polycandela or *coronae* being of considerable size. A bronze reliquary in the form of a Byzantine church preserved in the Cathedral Treasury of Aix-la-Chapelle may have suggested the form of the elaborate Rhenish enamelled reliquaries with domes, of which so fine an example is in the Victoria and Albert Museum. The influence of Byzantine ecclesiastical gold- and silversmith's work on that of the West is chiefly confined to the earlier Middle Ages, especially the period between the ninth and twelfth centuries. Common points between

the work of the East and West at this time are the extensive use of *repoussé* work, with filigree, *cabochon* gems and small plaques of enamel. After this the West went its own way and devised new styles of its own.

The most conspicuous examples of Byzantine metal-work on a large scale were bronze church doors damascened with silver, which may be noted on account of the process by which they were decorated. Several dating from the eleventh century were exported to Italy and are still in whole or in part preserved: at St. Paul's without the walls, Rome, only fragments remain, but at Amalfi and at Salerno complete doors exist. It may be noted that damasceners were called *barbaricarii* at Constantinople.



Fig. 157.—Bronze pedestal, sixteenth century. (See p. 9.)

Most of the work referred to in the above paragraphs was executed in the precious metals or in bronze. Iron and steel were of course continuously used by armourers; and iron domestic implements and utensils, such as knives, locks and keys, cauldrons, &c., were produced in all countries: the majority of these objects have disappeared, iron when exposed to damp or to the action of the atmosphere by no means possessing the durability of bronze. This metal was, however, largely used for decorative purposes, caskets and coffers being often mounted in it (Wall-Case 46), and locks, lanterns, and grilles of great beauty manufactured in various countries, especially in France and Spain. This beautiful forged work is hardly represented in the collection, and the student

who wishes to follow its developments should visit the gallery of ironwork in the Victoria and Albert Museum. There is, however, a branch of artistic ironwork, represented by a fine shield and a cabinet in the Waddesdon Bequest, which may properly be mentioned in this place : this is the art of damascening iron with gold. The word itself, like our own word damask, is derived from the city of Damascus, because the art of incrusting one metal in another, though widely disseminated in the East, was chiefly known as practised in that city. We have seen that the inlaying of silver upon bronze was practised in the Byzantine Empire, but it was also a favourite process in the Mahommedan world from the twelfth century (see p. 218, **Oriental Metal-work**). It was introduced into Venice in the fifteenth century by Mahommedan artists, the most famous of whom were Mahmud el-Kurdi and Zeyn ed-din. They and their pupils were known as *azzimini* (see p. 224), and the name became so general that the famous damascener Paolo Rizzo, of Venice, signed his work *Paulus ageminius faciebat.* The first Italian damasceners reproduced the conventional arabesques of their oriental teachers; but in the course of the century a growing preference for sculptural effects led them to introduce reliefs in their work, while the superior contrast of colour which iron afforded led them to inlay iron instead of bronze. The incrustations were now made subordinate to embossed human figures and architectural designs, especially upon the caskets, coffers, and cabinets for which Northern Italy was famous in the second half of the century (see the example in the Waddesdon Bequest). Many distinguished names are associated with the art of damascening in Europe. Benvenuto Cellini, in his Memoirs, relates that he was stimulated by the sight of a fine piece of Turkish work to try his own hand; Giorgio Ghisi of Mantua, armourer to the Emperor Charles V, who made the shield in the Waddesdon Bequest, made great use of the process. Damascening was generally popular with Italian armourers, but declined when the use of armour went out of fashion, though small objects, such as the mounts of purses, continued to be decorated in this way. The art was practised in Venice, Lombardy, and Tuscany, and was regarded as characteristically Italian.

MIRRORS.

Mirrors, down to the Renaissance, were all of small size and usually circular. The majority were mounted in cases of wood, ivory, or precious metal, and carried about on the person. Examples of the carved ivory cases popular in the fourteenth and fifteenth centuries are exhibited in Table-Case F. Representations of ladies using such small mirrors are frequent in illuminated

MSS., and are also to be seen on more considerable works of art; for instance, the figure of Prudence in Giotto's frescoes in the *Cappella dell' Arena* at Padua is holding such a mirror. Reflectors of the same size and form were sometimes fixed on stands and kept in the chamber, but probably the largest mirror known in the Middle Ages did not exceed the size of a plate.

The reflecting surface was usually of polished steel or other metal, and steel mirrors were still in use in the sixteenth century: in the inventory of the contents of the Palace of Westminster



Fig. 158.—Ivory mirror case, French, fourteenth century.

in A.D. 1542, reference is made to objects of this kind. The same inventory also refers to a round 'looking glasse' of Catherine of Aragon, which was probably a polished metal surface with a sheet of glass over it. An arrangement of this sort had been employed since the thirteenth century, and is mentioned by Vincent de Beauvais; and in the inventories of the Dukes of Burgundy, dating from the fifteenth century, we hear of the *verre à mirer*, evidently a looking-glass. Considering the great quantity of glass manufactured for windows from the thirteenth century onward, it would have been curious if the idea of employing

a substance admitting of so high a polish had not suggested itself to the mirror-makers of the day. But until a really satisfactory metallic backing was discovered, the advantage of a looking-glass over a steel mirror would be slight, and this fact may account for the persistence of the latter for domestic use down to so late a period. The amalgam of mercury and tin which gives the modern looking-glass its efficiency was not known before the sixteenth century.

MONSTRANCES.

The Monstrance was among the latest of sacred utensils. The Host was not exhibited for adoration before the Feast of the Holy Sacrament was instituted by Urban IV, A. D. 1262, and confirmed by John XII, A. D. 1311 and 1315. In order that the Host might be visible, it was necessary that it should be contained in crystal or glass, like relics, which were commonly shown in horizontal crystal cylinders fixed in metal mounts or stands. The earliest monstrances were simply reliquaries of this kind; but the long cylindrical form being ill adapted to the circular wafer, a new type was adopted in the sixteenth century. In this, the transparent portion is a crystal disc placed vertically in a frame of gilded rays. From the seventeenth century this has been the accepted form.

MORSES.

The Morse is the brooch which fastens the cope over the breast. It is usually circular, very large and often highly ornate. A fine Sienese example ornamented with translucent enamel on sunk relief of the fourteenth century is exhibited in the first Case on the left, in the passage leading to the Gold Ornament Room (fig. 41). Near it is a later Hungarian morse characteristically elaborate and set with turquoises.

NAPIER'S BONES.

These are sets of ten rods of wood, metal, or other material engraved with multiples, and used as aids for multiplication and division (see Table-Case **B**). Each of the four faces of every rod contains multiples of one of the nine digits, those on two of the faces being complementary to the other two. By the use of this contrivance, any number less than 11,111 may be multiplied, as well as any number which can be formed by the top digits of the rods when placed side by side. Napier's bones were devised by John Napier of Merchiston (1550–1617), inventor of logarithms, and are described in his *Rabdologia*, published in 1617.

NAVETTES. *See* p. 150.

NEEDLES AND NEEDLE-CASES.

The most famous centres for the production of needles in the Middle Ages were in earlier times Antioch, Damascus, and Adrianople, and in the sixteenth century, Cordova and Milan. The needle-case was carried by ladies suspended from the girdle. Down to the sixteenth century it usually consisted of a small lozenge-shaped case open at the bottom, made to slide up and down upon a cord to the lower end of which were attached several pieces of stuff of the same shape, in which the needles were stuck. When a needle was required the case was pushed up the cord, leaving the pieces of stuff exposed. The case was of wood, metal, ivory, or stiff embroidery, often very richly ornamented. In the sixteenth century a square form superseded the lozenge.

NIELLO.

Niello (derived from the Latin *nigellum*, on account of its blackness) is a compound of silver, lead, and copper to which sulphur and borax are added, fusible at a low temperature, and applied to metal (usually silver) in much the same way as enamel. Niello was known to the Romans, who used it freely, especially for decorating silver plate, examples of which may be seen in the Gold Ornament Room. In the Eastern Empire it was employed in the same manner, as well as for the decoration of finger-rings and articles of jewellery: Byzantine silver plate so ornamented may be seen in the Christian Room (Wall-Cases 4, 9 and 10), and gold rings in the Gold Ornament Room (Case O). The Franks and Anglo-Saxons also decorated rings with niello (examples in the same room, Case W). Theophilus (see p. 80) makes mention of niello; and doubtless ecclesiastical objects were decorated with it in his time. By the beginning of the thirteenth century it was extensively used, and a fine example of its application at this time is the crozier made by Frère Hugo of Oignies in Wall-Case 27, plate XI. About the middle of the fifteenth century the art of engraving silver with designs and subjects to be filled in with niello was very popular in Northern Italy, especially at Florence, and rings and other small pieces of jewellery were so ornamented (Case O in Gold Ornament Room), but also objects such as paxes (see p. 225) and cups (a fine example in the Print Room), which from the greater extent of their surfaces permitted the reproduction of elaborate figure-subjects. The manufacture of such niello plaques was formerly supposed to have exercised an important influence on the arts of printing and engraving. In order to judge of the progress of their work, the artists were in the habit of taking proofs at frequent intervals, first making a cast in which

the lines appeared in relief, and then from this a sulphur mould in which the designs were filled with lamp-black. The first proof which can be dated was taken from a Florentine pax with the Coronation of the Virgin, dating from the middle of the fifteenth century and formerly attributed to Tommasso (Maso) Finiguerra. Recent research has, however, made it probable that this and other proofs were not taken directly from the silver plate, but from the sulphur mould. Be this as it may, there was no intention of multiplying copies for popular use: the honour of first engraving metal plates for the press belongs not to Italy but to Germany. It may be noted as a curious fact that printing from engraved designs on metal was never discovered by the artists of the early Middle Ages, though much of their work was perfectly adapted to the purpose. When in modern times the great Crown Light in the Cathedral of Aix-la-Chapelle was taken down to be cleaned and repaired, impressions from the subjects engraved upon it were taken and actually published, and doubtless other mediaeval engravings would yield equally good proofs. Many great Italian artists worked in niello, among others Pollaiuolo and Francesco Raibolini (Francia).

NOCTURNALS. *See* p. 106.

NUMERALS.

For Roman numerals see under **Dates** and **Lettering**. The so-called Arabic numerals in universal use at the present day, though known to a few European scholars as early as the tenth century, were still rare in MSS. of the thirteenth century, and

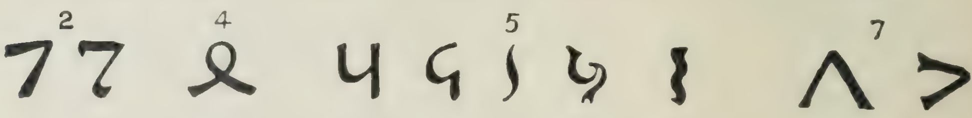


Fig. 159.—Early forms of Arabic numerals.

only became common, even in books, in the century following. Their first appearance upon *monuments* was formerly considered to date from about the middle of the fifteenth century, and this is certainly the earliest time at which they became at all general on buildings or on works of art; but recent investigations indicate that the Arabic numerals on the sculptures of the West Front of Wells Cathedral form an exception to this rule, and may be as old as A.D. 1250.

Arabic numerals have never entirely superseded the earlier Roman system, which is still often used for dates on buildings

and on the title-pages of books. Fig. 159 shows some earlier variants of the figures 2, 4, 5, and 7, the remaining figures differing little from their present forms. All these variants are older than the year A.D. 1310, except the last three examples of 5 and the last example of 7, which are of the sixteenth century. The figure 5 varied very much in that century, and some of its forms resembled those which French handwriting has preserved to this

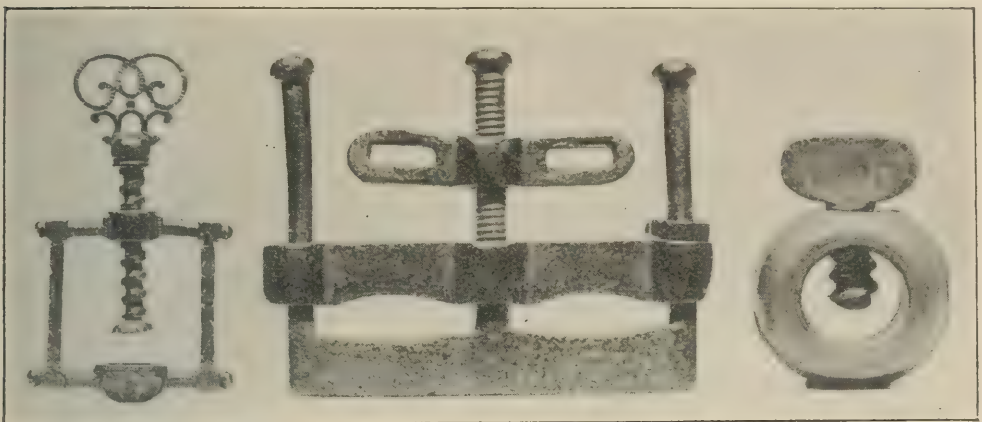


FIG. 160.—Nutcrackers (to right and left). In the middle, iron thumbikins.

day. The last 7 shows how the old figure became the new by being turned on its side; the last 2 illustrates a step in the evolution of that figure towards that now in use.

NUT-CRACKERS.

These were used in the Middle Ages in a form not differing essentially from that now in use, and a curious example with extremities in the form of human heads is exhibited. But in the seventeenth century nut-crackers in which the pressure was applied by means of a screw were common, and were often made of wood (Table-Case **B** and fig. 160).

OLIPHANTS. *See* p. 153.

OPUS ANGLICANUM. *See* p. 258.

OSMUNDS.

This name is derived from an old Swedish word *åssmund*, signifying bog-iron, which as early as the thirteenth century was

exported from Sweden to foreign countries. The bog-iron ores were collected by farmers and treated in small furnaces, the 'blooms' or masses of malleable iron thus obtained being cut up into pieces and forged into bars of a fixed weight. These bars, known in their turn as osmunds, seem to have been made in a peculiar shape, illustrated by the object in Table-Case **A** found on the site of the old church at West Blatchington near Brighton. Osmunds were imported into England in great quantities in the fifteenth and sixteenth centuries.

ORIENTAL METAL-WORK.

Wall-Cases 10–14 are chiefly occupied by examples of oriental metal-work, consisting of ewers, basins, bowls, salvers, cisterns, writing-boxes, candlesticks, and other objects of bronze, finely incrusted with silver. In the examples of the best period, the design was cut out in the metal base, and into the shallow bed thus formed silver plates were pressed. They were then worked in below the under-cut edges where there was usually a toothed line roughly incised to hold them still more securely; when burnished down they were ready to be engraved with details such as the features of the faces or the lines of drapery. Even if the surface to be inlaid was a broad one, stippling was commonly dispensed with, and was not generally practised until a later period. This artistic metal-work chiefly flourished between the twelfth and sixteenth centuries over the whole region between India and Egypt, an important centre being the city of Mosul. This city was within easy reach of copper mines, and had worked in metals from very ancient times; but it is remarkable that some of the very earliest specimens come not from the Valley of the Euphrates, but from regions further to the north and east. The general development of the industrial arts in these parts of Asia was no doubt favoured by the accession to power at the close of the first millennium of princes of Turkish blood who were no longer to be bound by the strict traditions of the Arabs. The new spirit is marked, among other things, by a change in the coinage of certain Mesopotamian dynasties, notably in that of the Urtukis and Zengides, and the Seljuks of Konia, who not only introduced upon their coins such devices as animals, monsters, and winged victories, but heads of Seleucid princes and even that of Our Lord, borrowed from the coinage of the Seleucid and Byzantine Empires. The figures were naturally in relief, and we find the earliest examples of Saracenic metal-work also ornamented in this way, while in later periods of development this style passed out of fashion: it has therefore been conjectured that the coins of the Urtukis and their contemporaries exerted a direct influence upon the decoration of artistic

metal-work in Mesopotamia. Vessels with ornaments in relief like the ewers in plate XII appear at the close of the twelfth century, when the coins had already been for some time in circulation; and some of the earliest are shown by their inscriptions to have been made in Persia and Armenia. But at the beginning of the following century the silver inlays, which at first had been employed on a modest scale, were extended at the expense of the embossed designs, and before long entirely superseded them, increasing the splendour but diminishing the permanence of the work. For most of the silver incrustation has been knocked out of the old pieces, and their present condition gives a poor idea of their former brilliance. In their original state the white tones of the silver often predominated, and were thrown into strong relief by the darker bronze, or by the black of a bituminous substance sometimes employed to fill up the spaces which were not incrusted. Gold was also used to a considerable extent to enhance the richness of the design.

Wherever it may have actually originated, the art of incrusting metal vessels with silver seems to have been already flourishing in Persia before the arrival of the Mongol invaders; it spread into Syria and Egypt at the time when members of the Ayyubide House of Saladin ruled in both these countries, and penetrated distant Yemen, where the sultans of the Rassulide Dynasty maintained close commercial and political relations with Egypt. This was in the time of the Abbaside Caliphs of Baghdad, and before the middle of the thirteenth century, so that most of the products of this early period show in a greater or less degree the influence of Mesopotamia. The middle of the thirteenth century marks an epoch in the history of the art. The Mongols burst into Western Asia, overthrew the caliphate of Baghdad in A.D. 1258, and pushed their conquests to Damascus and Aleppo. In Egypt the new dynasty of the Mamelukes (originally Turkish and Circassian slaves, who reigned from A.D. 1250 to A.D. 1517) replaced that of the Ayyubides, and extending their influence to Syria, checked the course of the Mongol invasion. There followed many years of reorganization, during which the new ruling houses were consolidating their possessions, and in this interlude the arts suffered from inevitable neglect. In some of the metal-work produced at this time we seem to trace a certain decadence, marked by the hesitations and uncertainties of a transitional stage. Then with the close of the thirteenth century what may be called the later period begins. This is characterized by the development of greater individuality in the several Mahommedan states, and more especially by the growth of the Mameluke school, which naturally had its principal seat in Egypt, but exerted a great influence on Syria throughout the fourteenth century.

Earlier Period. The bronzes of this period may be roughly

divided into two main groups—the Northern and the Southern—the former including the work produced in Mesopotamia, Persia, and Armenia, the latter that of Syria and Egypt: these two groups, from the influence exercised on both by the school of Mosul, may be conveniently described as Perso-Mesopotamian and Syro-Mesopotamian respectively. The first, which will doubtless be subdivided by future research, includes the large ewers and candlesticks with ornamentation in relief of the twelfth or early thirteenth centuries, of which mention has already been made, as well as a large series of objects in which the relief ornament has been replaced by a more extensive use of silver incrustation. In the second group, zones of medallions with scenes from battle, festivity, and the chase now cover the spaces to be decorated; borders are of guilloche or plaited design; arabesques become more intricate, and a kind of key-pattern is early used not only in small medallions but also to cover the whole background. The ewer shown in the middle of plate XII, which belongs to this group, is historically the most important of all pieces of Saracenic metal-work, for from the inscription on its neck, deciphered by Renaud, the first light was thrown upon the origin and date of the whole class. The inscription runs: 'Engraved by Shuga Ibn Hanfar of Mosul in the blessed month of God, the month Regeb in the year 629 at Mosul.' The year 629 of the Hegira is 1232 of our own reckoning, and the ewer thus not only tells us the place where the work was done, and the maker's name, but also the date to which it must be assigned. Curiously enough, it is the only example of the Mosul school as to which we have positive evidence that it was made in Mosul itself. In the zones of medallions which cover its sides are festal- and hunting-scenes, the whole upon a background of key-pattern forming a scheme of ornamentation admirable in its disposition and effect. Inscriptions on other early pieces, dating in some cases from the twelfth century, indicate places of origin considerably further to the East, for they bear the names of Ispahan, Nakhitchevan, and even Naishapur in Khorassan. Attention may be drawn to the spherical perfume-burner and salver (Wall-Case 10), both probably made for the Emir Baisari, a great noble who served the last Ayyubide sultan and the first Mameluke princes. Both objects are interesting as belonging to the transitional period just before the birth of the new Mameluke school. They are still strongly influenced by the Mosul style, and the figured medallions and background of key-pattern on the salver hardly suggest a Cairene origin. Though Baisari chiefly lived in Egypt, he is known to have passed some time in Damascus, and it is possible that these objects were made in Syria. The astrolabe in Wall-Case 25, which is a contemporary work, was made at Cairo, as the inscription states, by the astrolabist

Abd al-Kerim in the year 638 (A. D. 1240) for the Sultan Al Malik al-Ashraf of Diarbekr, nephew of the great Saladin. It must have been brought into Europe not long after its manufacture, for the names of the months and of the signs of the zodiac are added in Lombardic capitals of the thirteenth century. Two other famous examples of the work of the earlier period may here be mentioned; the Barberini Vase in the Louvre with the name of Malik Ibn Yusuf, Sultan of Aleppo between A. D. 1236 and A. D. 1260; and the cistern belonging to the Duc d'Aremberg at Brussels, with names and titles of Malik Salih Ayyub, Sultan of Egypt and Damascus, A. D. 1240–1249.

Later Period. Turning to the period after the rise of the Mameluke Dynasty, we find that in the Renaissance which followed the restoration of order and prosperity the craftsmen of Mesopotamia



FIG. 161.—Writing-case made by Mahmud, son of Sonkor of Baghdad, 1281.

again took the lead. The beautiful writing-box in Wall-Case 13 (fig. 161) is the work of Mahmud, son of Sonkor, of Baghdad, and it would be difficult to point to any object in this branch of art surpassing this in the delicacy and finish of its design. These writing-boxes of the close of the thirteenth and first half of the succeeding century often combine the ornamental motives of Mesopotamia and Mameluke Egypt, and it has been conjectured that they have been made in Syria, where the two styles would naturally meet. The second and larger example in the same Wall-Case has many affinities with the later Egyptian manner, which rejected figure-subjects in favour of bold inscriptions, often radiating from a centre, and specially affected medallions of flowers and leaves, or ducks arranged with their heads inwards. The arabesques of the Mameluke metal-workers are less geometrical, and present foliage of a more realistic character than those favoured by Mesopotamia in the earlier period. The large cistern and salver in Wall-Cases 10–11 may serve as typical examples of the Egyptian style, with their conspicuous inscriptions and backgrounds enriched with waterfowl, leaves,

and flowers. The inscription on the outer side of the cistern extols Muhammad, son of Kalaun (d. 1341), and that on the salver gives the name of his successor, Shaban. It was in the time of these two princes, who were surrounded by a wealthy court, that the art of the metal-worker reached its zenith in Egypt, and the most numerous and splendid specimens in public and private collections are of their time and from their country. A good example of the work done in the Eastern region during the second period is the bowl in Wall-Case 11, ornamented with figured medallions incrusted with gold and silver, and bearing an inscription with the names and titles of a Mongol ruler of Persia. The figures, differing in type and costume from those of the earlier Mesopotamian school, betray the influence of another race, while the beautiful decoration upon the under side gives early proof of the supreme skill of Persian artists in ornamental design.

The favourite figure-subjects represented on metal-work of this kind are hunting, battle, and convivial scenes. In the first we see both hawking and the pursuit of wild animals on horseback: in the last, princes entertained with music, dancing, and the wine-cup. A few objects, of which there are no good examples in the Museum collection, have representations of Christian scenes and personages, such as the Annunciation, the Adoration of the Magi, the Baptism, the Raising of Lazarus, and the Last Supper. The inscriptions show that most of these were made for Mahommedans, and the anomaly is perhaps to be explained by supposing that the princes of the fourteenth century were as indifferent in this matter as the earlier rulers of Mesopotamia, who did not hesitate to adopt Christian designs for their coins. It should also be remembered that many of these examples are connected with the Ayyubide sultans, who often maintained friendly relations with the Christian princes of Syria, and were believed to have been occasionally themselves in sympathy with Christianity. In the fourteenth and fifteenth centuries we find candlesticks and other objects decorated with European shields of arms, or inscribed with the names of Christian rulers; these were probably made to European order. A candlestick in Wall-Case 12, of the fourteenth century, bears the arms of the family of Boldù, of Venice. More frequent than European arms are the purely Mahommedan devices found upon many of these bronzes, as well as upon the fine enamelled glass lamps and other vessels (Glass Room, Wall-Cases 60–61) probably made in Syria during the fourteenth century. Some devices can be assigned with comparative certainty to historical persons: the lion was borne by the first Mameluke Baibars; but the duck, which is commonly assigned to Kalaun, was not his exclusive device, as it occurs on objects from Yemen and is frequently employed as a purely

ornamental motive. The cinquefoil seems to be without doubt the badge of the Rassulide dynasty of Yemen; but whereas this is dynastic, the lion of Baibars was personal, and not borne by his descendant. Other devices seem to have been purely official; and the man who filled many posts during his career might have a different device at different periods of his life.

The *inscriptions* with which a large number of objects are engraved are usually of a benedictory or eulogistic character. When they give a date, or recount the names of historical personages, they are interesting and important; but as a rule they are ordinary examples of the more florid oriental style, such



FIG. 162.—Damascened candlesticks, and bowl damascened by Mahmud al-Kurdi, Venice, early sixteenth century.

as that found on the cylindrical box in Wall-Case 12 made for Badr ad-din Lulu, prince of Mosul (A.D. 1233–1259): 'Glory to our Lord the Merciful King, the Wise, the Just, the aided of God, the Triumphant, the Victorious, the Champion of the Faith, the Warden of Islam, the Full Moon of State and Church, Pearl, Sword-blade of the Prince of the Faithful.' An incense-burner in Case 10 bears the following quaint inscription: 'Within me is Hell-fire, but without float sweetest odours—made in the Year 641'=A.D. 1243.

The decorative designs upon this incrusted metal-work are composed of motives of very diverse origin blended with much skill, and ultimately forming a distinctive style. Thus we find the rosettes and guilloche borders which Mesopotamia preserved from Assyrian times; the zodiacal signs of Chaldea: the cartouche

with the signs of Upper and Lower Egypt; and the two-headed eagle which ancient Cappadocia is thought to have handed down through the Saracens, Crusaders, and Byzantines to become the emblem of two imperial houses of Europe. The zones of medallions are familiar to us from Roman mosaics and Sassanian textiles; the scenes of carousal and the chase were also favourite subjects with the artists of the ancient Persian monarchy. Chinese motives, following the Mongolian invasions, came in during the second half of the thirteenth century, and may be remarked both on contemporary Persian lustred tiles and on the enamelled glass to which allusion has already been made. Thus the Fêng-Huang or phoenix occurs both alone and in conflict with the dragon; and such Chinese designs, adopted all over the Mahommedan territories in Asia, illustrate the inter-dependence of the industrial arts in the early Middle Ages. The arabesques which hold so large a place in Saracenic ornamentation, and received their name for that reason, are designed from the palmette and acanthus of Greece, transmitted through Hellenistic and Byzantine art. Their pedigree can be clearly traced back at any rate to Justinian's time, and in the sculpture of churches built by that emperor we may see oriental art in the making; it was then that more decorative designs, such as floral scrolls, were promoted from a subordinate position in the border to the place of honour in the centre of the composition, a change distinctly opposed to all classical ideas.

The taste for incrusted metal-work was transmitted by oriental workmen to Italy, and at Venice in the fifteenth century the art of damascening obtained a firm foothold, ultimately winning a great popularity throughout the northern part of the peninsula (Wall-Cases 15–16). A distinguished oriental damascener working in Venice was Mahmud al Kurdi, examples of whose work are shown. The Italians soon forsook the conventional floral designs of their masters, and adopted figure-subjects: they also manifested a preference for iron as a base. The Italian damasceners were known as *Azzimini*, a corruption of the Arabic, *El Agem* = Persia. The Venetians adopted several oriental forms for domestic utensils, among others the candlesticks with large drum-like bases: such a candlestick may be seen in Catena's picture of St. Jerome in his study in the National Gallery (No. 694).

Incrusted metal-work continued to be made in Damascus, Mosul, Aleppo, and Baghdad until the fifteenth century, but the Sack of Damascus by Timur in A.D. 1401 drove the industry further East into Persia, Bokhara, and India, where it still survives. In Northern India the work is called *Kuft*, while a special name *Bidri* (from Beder, a town in the state of Hyderabad) is used for damascening in silver upon a darker metal. The incrustation of copper with silver, practised in Tanjore, is also a branch of the damascener's art. Fine examples of these Indian styles may be



PLATE XII. SARACENIC EWERS, EARLY THIRTEENTH CENTURY.

[See p. 219.

seen in the India Museum at South Kensington, and a few are exhibited in the Asiatic Saloon.

OSTRICH EGG CUPS. *See* p. 99.

PALIMPSEST BRASSES. *See* p. 74.

PALL MALL. *See* p. 138.

PAPAL RINGS. *See* p. 178.

PATENS.

The paten has almost always assumed the form of a shallow circular plate or disc; the rectangular Merovingian paten from Gourdon, in the Cabinet des Médailles at Paris, dating from the seventh century, is an exception to this rule. The patens represented in Carlovingian miniatures appear to have been hardly more than plain discs, but the *Liber Pontificalis* mentions examples of the ninth century decorated, like that from Gourdon, with precious stones. It was in the ninth century that figures, usually the head of Our Lord (the Vernicle), began to be engraved upon patens. The custom of developing the depressed centre of the paten with a series of lobes may have begun even earlier, though the paten of St. Gauzlin, Bishop of Toul, in the Cathedral of Nancy (tenth century), is one of the oldest surviving examples. Such lobes henceforward become a permanent feature, and it is conjectured that at first they may have been adopted to facilitate the arrangement of the wafers, though a symbolic meaning has been attached to them. English patens of the pre-Reformation period are more numerous than chalices of the same date, about a hundred being known, but only about a quarter of this number are with the chalices to which they belong. Among the earliest is one in the Church of Wyke near Winchester, which must have been made about 1280.

PAXES.

The pax (*osculatorium, tabula pacis, paxillum, pax borde,* &c.) was a small panel, generally carved or painted with a sacred subject (e.g. the Crucifixion, Entombment, Trinity, Annunciation, Adoration of the Magi, Baptism, or figures of patron saints), and usually made of precious or other metal, ivory, or wood. It first came nto use in the course of the thirteenth century, down to which

time the members of the congregation had kissed each other after the Mass, in obedience to the injunction 'Greet one another with a holy kiss'. The earliest notices of the pax are derived from English sources, and it is considered probable that the change originated in this country. Paxes of earlier date than the fourteenth century are rare; by the fifteenth century they were universal, and, especially in Italy, had become veritable works of art, with enamelled or nielloed pictures and finely chased frames (Wall-Cases 31 and 32 and figs. 99 and 163). The kissing of the pax was one of the occasions on which local questions of precedence became acute. In Chaucer's *Persone's Tale* it is said of the proud man, 'eke he waiteth to sit or go above him in the way, or kisse the pax or ben encensed, or gon to offring before his neighbour.'

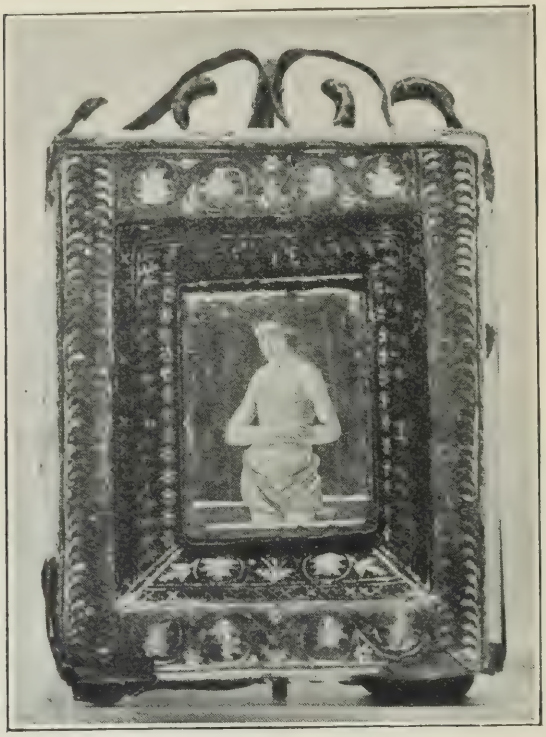


Fig. 163.—Venetian enamelled pax, sixteenth century.

PENNERS OR PEN-CASES.

Scribes, clerks, and others were in the habit of carrying their ink-bottle and case with pens, erasing knife, and other accessories attached by cords to their girdles. In France the penner was called either *écritoire* or *galemart*, the latter word being derived from the Latin *calamus* through the Italian *calamaio*. The penner was commonly made of cuir-bouilli (see p. 96), and a fine example said to have belonged to Henry VI is in the Victoria and Albert Museum.

PENCILS AND PENS. *See* p. 271.

PEWTER.

Pewter is an alloy, of which the principal constituents are tin, and lead or antimony. The tin industry was recognized by royal charters in the thirteenth century, but the ordinances of the London pewterers were first committed to writing in the year 1348: the first charter giving the right of assay was granted by

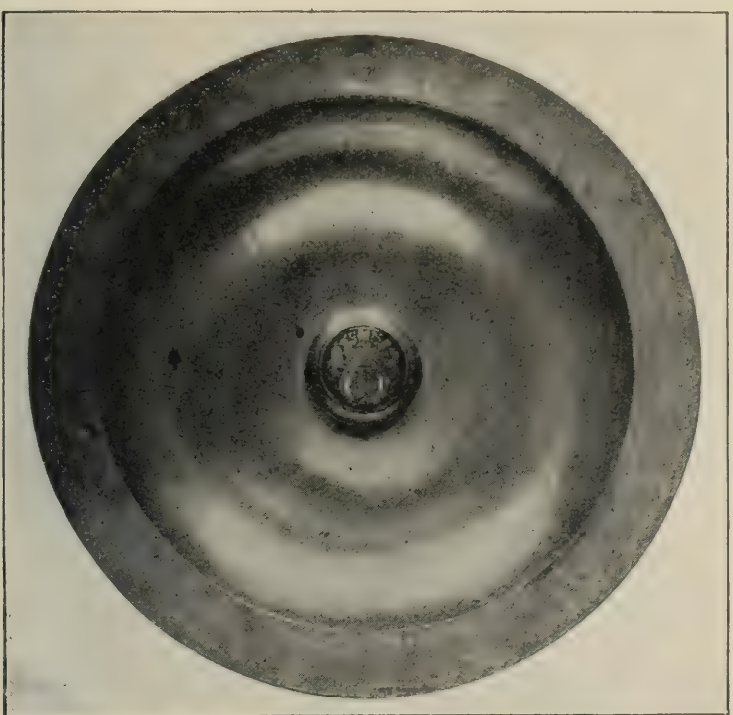


Fig. 164.—Pewter dish with enamelled roundel, time of Charles I.

Edward IV in 1473. Pewter below the standard quality could now be confiscated, and marked with the stamp of a broad arrow. In England, outside London, the principal centres of pewter-making were first York and Newcastle; later Exeter, Bideford, Barnstaple, Birmingham, Bewdley, Beverley, and Bristol. In Scotland, Edinburgh and Glasgow were the chief places of manufacture: in Ireland, Dublin and Cork. On the Continent, pewter-making was widely practised in France, and in Germany, where Augsburg and Nuremberg were the main centres: records show that pewterers were working in these cities in the early part of the fourteenth century. The greatest French pewterer was François Briot (c. 1550), whose work is highly orna-

mented with medallions and ornaments cast in relief (Tankard in Wall-Case 17). His style and even his designs were imitated by the German Caspar Enderlein (d. 1633), and by other Nuremberg craftsmen whose work is illustrated by the plates in Wall-Cases 17–18.

From the close of the thirteenth century, and during the century which followed, all great houses had services of pewter, and almost every form of plate is described in inventories. In the fifteenth century it came into more general use, though it was still very expensive, and the poorer classes continued to use wooden vessels. The set or 'garnish' of pewter for use in a household consisted of twelve dishes, twelve platters, and twelve saucers; if larger plate was required for entertainments, it was hired. It was not until the close of the sixteenth and the first half of the seventeenth century that pewter was plentiful in ordinary households. It continued in common use until the eighteenth century, when it was gradually displaced by services of glazed earthenware, though in isolated instances and for particular purposes it continued in use down to modern times; thus for beer-tankards and liquor-measures it is still employed.

Though the Council of Westminster (A.D. 1175) had ordered that chalices should be of gold or silver, pewter was used for Church vessels in poorer churches in the early Middle Ages; pewter funeral chalices for burial with priests (fig. 76) were made down to the fifteenth century. From the close of the sixteenth century flagons of pewter were much used in English churches (see the example in Wall-Case 18): the earliest with straight sides date from 1602. Plates and alms-dishes were also made of pewter.

There are no series of date-letters upon pewter by which the exact age of any piece can be determined as in the case of silver. But marks were compulsory from 1503, and by the regulations of the Pewterers' Company each man was bound to have his own 'touch' or mark, which was stamped upon all his work. In London, the Company's quality-mark (the crowned rose), or the special quality-mark (the letter X), was added. Records of all touches are known to have been kept in the Hall of the Company at least from 1540, but the actual records preserved only begin a century later. They take the form of five sheets of pewter ('touch-plates') on which a great number of makers' touches were stamped between the years 1640 and 1824; but unfortunately the register of the makers' names has been lost. As the stamps are struck irregularly and not in chronological order, it often happens that the only clues to date, apart from those given by the style of the objects, are furnished by the initials or names accompanying the touches, which are usually pictorial and represent figures such as the mermaid, swan, wheatsheaf, crowned portcullis, or pegasus.

In the seventeenth century the hall-marks for silver were frequently imitated, and when they were used alone without any pewter-marks, the intention was doubtless to deceive the purchaser. The Company imposed a fine on those found guilty of this offence.

Among the pieces exhibited are a Temperantia salver by



FIG. 165.—Pewter dish with figure of Temperance, by Caspar Enderlein.

Enderlein (so called from the figure of Temperance which forms a principal figure in the ornamentation), and several Nuremberg plates and a tankard similarly decorated with cast reliefs. Attention may also be drawn to a few salvers and plates, two of the fifteenth century stamped with an ostrich feather and a crown, found at Guy's Hospital, one (fig. 164) having in the centre an enamelled medallion with the arms of Charles I. In Table-Case B are a number of spoons which follow the form of contemporary silver examples.

PHYLACTERIES.

The mediaeval phylactery, the name of which is derived from the Greek and signifies a defence or preservative, was a small reliquary usually worn upon the person. It varied considerably in form, and in this differed from the phylacteries of the Jews.

PILGRIMS' SIGNS. *See* p. 69.

PINS.

Ordinary pins in the Middle Ages were made of bronze, and in the fourteenth century English pins appear to have been highly esteemed. Pins occupying a conspicuous position in ladies' toilets were often of the precious metals, with ornamental heads.

Early examples of the modern style of pin are exhibited in Table-Case B.

PLAQUETTES.

The name of plaquettes is given to small bas-reliefs in bronze or lead, produced in their greatest perfection at the end of the fifteenth and in the first half of the sixteenth century. Their subjects are largely copies from antique gems, from reliefs in the precious metals by the Renaissance goldsmiths, or from niellos and engravings; and they were made with the object of rendering fine work accessible to a wider circle than that of wealthy collectors and patrons. Except where moulds were actually made from the originals, as in the case of gems, seals, and a few ivory carvings, the reproductions are not slavish copies, but reveal the individuality of the artist. Like engravings, they have different 'states', and the work of some artists is constantly represented in more than one. The issue of a fine design in the form of a plaquette was really a publication, and the circulation of these small reliefs had a considerable influence upon various branches of art; for they were not only directly copied by illuminators, workers in metal, painters on maiolica, and enamellers, but even artists of the first rank reproduced them in great sculpture. Thus Donatello took plaquettes as his models for the medallions which he made for the palace of the Medici. Plaquettes were sometimes kept for their own intrinsic beauty; but their chief use was to decorate such objects as caskets, inkstands, and sword-pommels, to which purposes their forms are often obviously adapted.

These small reliefs were principally made in the North of Italy,

in Padua, Verona, Venice, Mantua, Brescia, Parma, Bologna, and Ferrara ; their art has all the characteristics of the North Italian style, Tuscan and Roman artists never having produced them in



Fig. 166.—Plaquettes : in the centre and on the left the Fall of Phaeton, and Hercules and Cacus by Moderno ; on the right Music, by Peter Flötner.

great numbers. Their popularity soon spread into other countries, especially France, Flanders, and Germany.

The best-known artists who made plaquettes were Agostino di

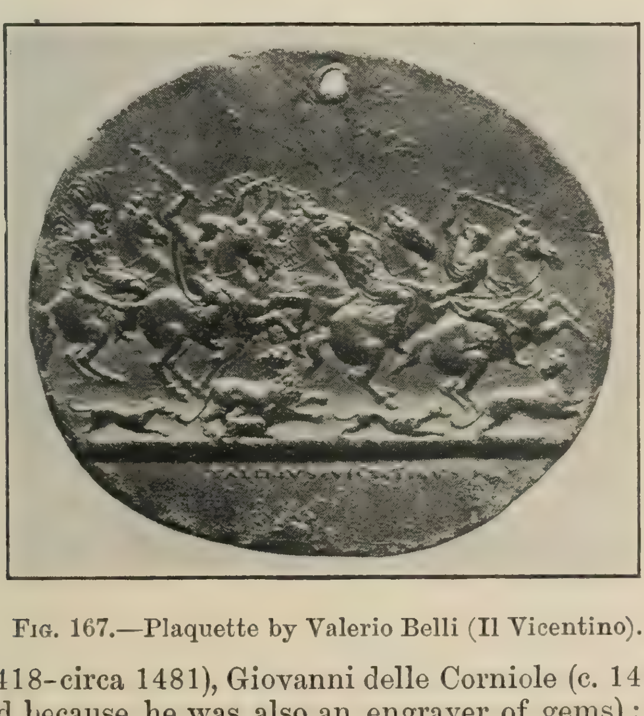


Fig. 167.—Plaquette by Valerio Belli (Il Vicentino).

Duccio (1418–circa 1481), Giovanni delle Corniole (c. 1470–c. 1516 —so called because he was also an engraver of gems) ; Caradosso

Foppa (c. 1446–1530); the artist known by the assumed name of Moderno, belonging to the school of Padua and Venice, and working at the close of the fifteenth and beginning of the sixteenth century; Andrea Briosco, styled Il Riccio, of Padua (1470–1532), whom M. Molinier would identify with Ulocrino; Valerio Belli of Vicenza (Il Vicentino) (1468–1546); Fra Antonio of Brescia; and Giovanni Bernardi di Castelbolognese (1495–1555). The French and Flemish artists are unidentified, but in Germany the work of Peter Vischer (1455 or 1456–1529) and Peter Flötner (d. 1546), both of Nürnberg, is well known. The latter had a predilection for lead, in which metal some of his finest plaquettes are executed (fig. 166).

PLATE.

It has been stated (see **Chalices**) that even Church plate older than the sixteenth century is very rare. But plate manufactured for secular uses was even more subject to destruction, for if it escaped the danger arising from religious conflicts it never had the advantage of sanctuary, and in England not a score of pieces earlier than the Tudor period are in existence. The Wars of the Roses did for our secular plate what the Reformation did for that of the Church; and though the period between Elizabeth and the Restoration was not so disastrous, old plate was then by no means as safe from promiscuous destruction as it is now. Things were not quite so bad as in the Middle Ages, when there were no banks, and plate and jewels, which represented capital, were carried with the owner from place to place, to be pledged or melted down when ready money was required. But the Civil Wars were very destructive, especially to College plate; the Mint in the reign of William III drew largely upon the plate-chests; and the light-hearted manner in which the men of the eighteenth century melted down their old silver in order to obtain services of a newer fashion was responsible for yet further losses. The state of affairs was little better in other countries. Charles IX of France melted down a great part of his treasure, and on that occasion even the famous salt-cellar made by Benvenuto Cellini for Francis I, and now in the Vienna Museum, narrowly escaped destruction. There is documentary evidence to show that the development of secular silversmith's work had been as continuous in England as on the Continent. We hear of Odo, a goldsmith at the court of Henry III, and of his son Edward of Westminster. The Paris list of persons subject to taxation in A. D. 1292 mentions several English craftsmen living in that city—Robert, John of London, Gilebert, and Sendrin. In 1399 the King of England presented Charles VI of France with an enamelled gold goblet and ewer; while the in-

ventory of the Duke of Brittany, dating from A.D. 1418, speaks of a golden ewer and other objects of English manufacture With the Renaissance, references to craftsmen and their work become more frequent. Holbein, whose unrivalled designs for silver-work are preserved, was a friend of John of Antwerp, who worked in London, and has left a crayon portrait of Thomas Morrett another London goldsmith. From inventories made for Mary and Elizabeth we learn the names of Cornelys, Mabell, Haryson, Reynolds, Busshe, Bowes, Brandon, Derick, Partrage, and Nicholas Hilliard the famous miniaturist. Down to the close of the sixteenth century the better traditions of Holbein and



FIG. 168.—Medallions: the great Duke of Marlborough (d. 1722); portrait of a lady, French, about 1550.

of the Renaissance continued, but with the seventeenth century the finer style was debased by exaggeration and over-emphasis. The strapwork and conventional foliage of the earlier period was replaced by naturalistic flowers often of disproportionate size and without unity or cohesion of design. At the close of the century the silver of the Restoration was famous for its high quality, and its acanthus and other ornaments are often of great merit. Of the subsequent changes of style it is impossible to speak in this place, as there are hardly any examples of later English plate in the Collection.

Several pieces of early English plate are exhibited in the Franks Bequest in the Gold Ornament Room (Cases Q and S). Mediaeval work is represented by mazers (see p. 198), that of the Renais-

sance by the Burleigh Cup, and by the stoneware jugs with silver mounts.

The most essential facts with regard to the marking of plate in Great Britain may be stated here. The most ancient mark is the crowned leopard's (lion's) head derived from the royal arms and prescribed by statute in A.D. 1300. It is probably to be regarded as a standard mark rather than a hall-mark peculiar to London, where, except between the years 1697 and 1720, it has always been used on silver. In 1363 it was enacted by statute that each goldsmith should have his own mark to be set on all his work after it had been assayed. Some of the early makers' marks were signs, but from about the beginning of the seventeenth century initials became general. The most important of all marks, the date-letter which makes it possible to assign a piece of plate to a definite year, though not mentioned in documents until A.D. 1597, was in existence at any rate by A.D. 1478. Date-letters are successions of alphabets each of twenty letters, J, U or V, W, X, Y, and Z being omitted. The style of the characters varies, no two series of



Fig. 169.—Hall-mark from an English silver spoon, 1639 (Table-Case B).

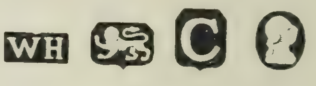


Fig. 170.—Hall-mark from silver-gilt cup, 1799 (Wall-Case 48).

similar letters following each other, and discrimination has been rendered more certain by the enclosure (since 1560–1561) of the letters of each alphabet in escutcheons of distinctive form. The familiar lion passant is not known as a regular mark earlier than 1545, since which time it has been continuously used on standard silver. Between March 27, 1697, and June, 1720, a lion's head erased and a figure of Britannia were introduced on silver in place of the leopard's head and lion passant, to mark the raising of the standard for silver plate. In the latter year the old lower standard of 11 oz. 2 dwt. fine was restored, and with it the two old marks; the lion's head and Britannia are rarely found after 1732, but when silver of the higher standard is made they are still employed. The head of the reigning sovereign has been stamped upon all dutiable silver, except objects of certain specified classes, since 1784. Down to 1798 gold had been marked in the same way as silver, but in that year a crown and the figures 18 were authorized for gold of 18 carats in place of the lion passant. Gold of 22 carats continued to be marked like silver until 1844, when a crown and the figures 22 were introduced instead of the lion. Assay towns other than London have all their separate marks and date-letters, so that an extensive knowledge, or the constant

use of printed tables, is necessary in order to identify provincial plate. Thus Edinburgh has a castle; Glasgow a castle or (from



Fig. 171.—The Royal Gold Cup in its original form (see next page).

1819) a tree, fish and bell; York has as its old mark a fleur-de-lys and leopard's head crowned, both dimidiated and conjoined on a circular shield, as its new mark the city arms, and so on.

France has been more unfortunate than our own country with regard to the loss of its early plate. Wars, revolutions, and the melting-pot have together caused the disappearance of almost all the fine products of the mediaeval French goldsmiths mentioned in the early inventories, though the Louvre still has the sceptre of Charles V and a fine fifteenth-century salt-cellar from the old royal treasure. The British Museum is therefore doubly fortunate in possessing in the Royal Gold Cup (Gold Ornament Room, above Case W) a magnificent example of French art dating from the close of the fourteenth century. This cup, which is enriched with translucent enamels of the most sumptuous character, originally had a shorter stem without the enamelled roses (see fig. 171) and stood upon a separate stand, now lost. In A.D. 1391 the Duc de Berri presented it to Charles VI, in whose inventory it is mentioned, and it was probably made to the order of the first-named prince. While John, Duke of Bedford, was Regent of France it became his property, and he left it to his nephew King Henry VI. It remained part of the English royal treasure until the reign of James I; but in A.D. 1604, on the occasion of the treaty of peace between Britain and Spain, that King presented it to the Constable of Castile, Juan de Velasco, who came to England as special envoy. By the Constable it was given, in the year A.D. 1610, to the Convent of Santa Clara at Medina de Pomar, near Burgos, where it remained until 1883, when it was sent to Paris to be sold for the benefit of the Convent, then urgently in need of money. It was bought by Baron Pichon, in whose collection it remained until 1891, when it was acquired by Messrs. Wertheimer of London for £8,000, and ceded by them to the Museum for the same amount. There can be little doubt that the Cup was originally made for secular use, though while in Spain it was specially consecrated, and devoted to religious purposes. It is distinctly described in the inventory of Charles VI as a *hanap*; while its original possession of an independent stand would in itself almost suffice to remove it from the category of sacred vessels.

The works of the great French silversmiths of the sixteenth and seventeenth centuries have hardly fared better than those of their mediaeval predecessors. In 1688 the State was so impoverished by the wars and extravagance of Louis XIV that the monarch himself set the example of melting down his costly possessions in gold and silver; and in this he was so loyally followed by his nobles that nearly all the fine early work still left in the country disappeared. It was not until about 1720 that the industry of the silversmiths began to recover; and after that

time the forms and decoration of plate followed the general developments of French taste, as exemplified in the other industrial arts.

Italian gold and silver plate has almost entirely disappeared. From representations in pictures and engraved designs made for the use of silversmiths it is possible to form some notion of the wealth once in the possession of the princes and wealthy families of the peninsula, and to observe the influence exercised by antique forms upon the Italian style: but wars and revolutions have led to the destruction of them all. The loss is all the more to be deplored because many of the great artists began their careers in goldsmiths' workshops (see p. 204). Of Benvenuto Cellini's handiwork there only remains the salt-cellar already mentioned as in the Vienna Museum: of the cups and other objects formerly assigned to him the majority are really of German origin.

Germany is richer in secular plate than any other country, though the greater part of it dates from the sixteenth and seventeenth centuries: the Waddesdon and Franks Bequests (in the Waddesdon and Gold Ornament Rooms) contain a number of interesting examples. In Germany itself a great quantity of old plate still remains. The *Kaiserbecher* of Osnabrück, a cup with cover partly restored, is a unique example of thirteenth-century work: it is ornamented with engraved medallions of the Virtues and Vices and other figures, and with champlevé enamel. There is a long interval between this and the other surviving specimens of the German goldsmiths' art; but in the middle of the fifteenth century the great increase of wealth in the German towns, especially at Augsburg and Nuremberg, led to a large production of cups and other objects, the earliest of which are still in the Gothic style. The end of an elephant's tusk from the Lüneburg city plate, now in the Berlin Kunstgewerbe-Museum, is adapted as a drinking-horn, and has an elaborate mount with Gothic architectural forms. But this architectural style, so persistent in objects of ecclesiastical use, had as early as the fourteenth century been in great part abandoned for secular purposes; in the place of Gothic forms, others were adopted better suited to the intrinsic qualities of metal. The lobed or gadrooned surface of foot, bowl and cover, is the most conspicuous feature of the German pre-Renaissance cups, and was at once so attractive and so practical that it continued in modified forms side by side with Renaissance motives down to the eighteenth century. A splendid example of such a lobed cup is that presented by the Emperor Frederick III and Mathias Corvinus to Vienna A.D. 1462. Ewers in the same style are rarer than cups; the finest that has survived is at Goslar and was made in A.D. 1477.

The influence of the Renaissance began to modify the style of

the goldsmiths' work in Germany at the close of the first quarter of the sixteenth century, but it was not until about 1550 that the grotesques, arabesques, and other universally current designs were generally adopted. It was then that figures from classical mythology came into fashion: figures of the saints had been largely displaced as a result of the Reformation; but certain biblical scenes and characters were still retained. The designs used by the goldsmiths were now provided by artists not themselves working in metal, and sometimes men of the very highest reputation. Those which Hans Holbein made for goldsmiths are justly celebrated, and a number of lesser men, Altdorfer, Aldegrever, the Behams, Hopfer, and Virgil Solis, were continually occupied with this kind of work; but there still remained in the workshops a certain number of Gothic patterns which continued to find favour with the silversmiths. Besides engravings of ornament, wooden models were occasionally used, while lead casts of the figures, or of the most successful ornamental motives, were kept for future use. Casts of this kind were not only taken from indigenous silver-work, but from foreign work in other materials, such as antique coins or cameos, Italian plaquettes, or French pewter.



Fig. 172.—The so-called Cellini Cup, German, Nuremberg, sixteenth century.

The rise of the goldsmith's art in Germany was a result of commercial prosperity and civic development, and a large proportion of the orders received in the workshops came from city corporations or from persons desirous of making them gifts. The principal towns were exceedingly rich in plate, and the remains of the Lüneburg plate now in the Kunstgewerbe-Museum at

Berlin furnish a most instructive illustration of the changes of style which followed each other from the late fifteenth century down to about A.D. 1600. Guilds and other bodies were also possessors of silver plate. It was the custom in Germany in the sixteenth and seventeenth centuries to celebrate any event of local or even domestic importance by the presentation of a cup, and to this usage we owe some of the finest examples. The shapes of German cups were very various; nautilus-shells, coco-nuts, and ostrich-eggs were mounted in a suitable style, and in the late sixteenth and seventeenth centuries there was a taste for vessels in human or animal form (examples in the Waddesdon Bequest), and many ingenious designs enlivened the toasts which were so numerous at that period. Of these we may mention the so-called *Jungfrauenbecher* (called in England wager-cups) in the shape of a standing female figure holding above her head a revolving cup. When reversed, the figure itself formed a cup; and when both were filled together the gentleman first drank the contents of the larger receptacle. He afterwards had to turn the figure the right side up without spilling any of the wine in the smaller cup and so present it to the lady (example among the cups of the Franks Bequest in the Gold Ornament Room, Case S).

Although cups are most numerous, ewers and basins for washing the hands at meals, and dishes of tazza form for sweetmeats, were also made in great quantities. The former were essential at meal-times, for until the close of the sixteenth century forks were not generally used (see p. 133). The old lion-form of the Mediaeval *aquamanile* (fig. 102) was still occasionally retained, but about the middle of the sixteenth century the graceful Italian ewer was adopted. 'Salts' and 'nefs' were also to be found on the tables of the wealthy; the last-mentioned, in the form of a ship, was originally intended to contain the knife, spoon, &c., of the master of the house, but was subsequently (in the sixteenth century) adapted for use as a cup (example in the Franks Bequest). Vessels of oriental porcelain and pottery or early Venetian glass were mounted for table use, while bowls of crystal, cut and polished in Bohemia, were also frequently employed. Antique coins and gems, or old German coins, often formed part of the ornamentation of cups. German silversmiths displayed great skill in the decoration of wooden caskets and cabinets, which in the seventeenth century assumed great proportions and were used to contain all manner of toilet and other accessories. The cases of watches and clocks (see Table-Cases G and K) were also finely chased and engraved.

The regulations of the Guild of Goldsmiths, which in the fourteenth century was established upon a permanent basis, prescribed that all silver-work had to be stamped. Marks were first impressed by a committee of masters; afterwards came the

stamping with the city mark. The most famous city marks were the pine-cone of Augsburg and the capital N of Nuremberg, but as silver-work was produced in all the important towns the number of marks is very considerable. At the same time the master who made the piece impressed his private mark, usually consisting of his initials. It was the rule at Nuremberg that every apprentice should make three master-pieces upon his admission as a master, and of these the most important was a lobed cup, richly ornamented on the exterior: the cup in the Gold Ornament Room (Case **W**, and fig. 172), often wrongly described as the Cellini cup, is such a Nuremberg master-piece; the custom continued down to the eighteenth century, and a number of such cups are in existence. Though the productions of certain cities can be identified by certain peculiarities of style there is a general resemblance among them all, partly due to the custom which prevailed among young silversmiths of spending some time at the great centres of Augsburg and Nuremberg, partly to the similarity among the engraved designs from which all masters worked. Among individual names may be mentioned Wenzel Jamnitzer (A.D. 1508–1588) of Nuremberg, whose work is characterized by marvellous execution of details and a love for the exact reproduction of natural forms, which sometimes leads him into an over-luxuriance of decoration: the silver bell in the Waddesdon Bequest (No. 95, Case **F**) with marine creatures, recalling the style of Bernard Palissy, is in the manner of Jamnitzer. Another famous Nuremberg master was Hans Petzolt (A.D. 1551–1633). It is of interest to note that there is in the Museum a design by Albrecht Dürer for a table-fountain. In Augsburg, which in the seventeenth century supplied almost the whole of Northern Europe, the best-known names are those of Mathias Wallbaum and David Altensteter. The famous engraver Theodor de Bry (A.D. 1528–1598), though born in Liège, worked principally in Frankfort-on-the-Main: he designed details of ornamentation, and not the whole cup or vessel.

The influence of the German style was widespread and affected the silversmith's art throughout the central parts of Europe, into the development of which it is impossible to enter here.

See also **Mazers, Pewter, Spoons, Forks.**

PLATES.

Plates in our sense of the word were hardly used in the Middle Ages. The first substitutes were trenchers (Fr. *tranchoirs*) or slices of bread, upon which the portions of meat were placed: on these the guests cut up the food with their knives. Wooden or metal trenchers were however soon made, and for a long time

were in existence contemporaneously with those of bread: in the households of the great they were of silver or even gold.

POISON, TESTS AGAINST.

Various gems and other substances were supposed to reveal the presence of poison. Such were agate, jasper, 'serpents' tongues' (really ray's teeth), and fragments of 'unicorn's horn' (which see). It was an old belief that a cup made of the alloy of gold and silver called *electrum* imparted to any poisoned liquid poured into it all the colours of the rainbow; and it has been conjectured that this may have first suggested the use of the word electrum for enamels, so conspicuous for the number and brilliance of its colours.

POMANDERS. *See* p. 172.

PORRINGERS. *See* p. 102.

PORTABLE ALTARS. *See* p. 255.

PORTRAITS.

On the walls of the Mediaeval Room and the Gold Ornament Room are hung a number of oil paintings. These are in part portraits of benefactors to the Museum, in part those of historical persons. They are the remainder of a larger series of pictures, mostly presented to the Museum soon after its foundation, the best of which have been transferred to the National Gallery and the National Portrait Gallery.

Among the pictures in the Mediaeval Room are the portraits of Sir Robert Cotton, founder of the Cottonian Library, painted by Cornelius Janssen in 1629, and of his son, Sir Thomas Cotton (d. 1662), probably by the same artist, both near the west door; the contemporary portrait of Mary Queen of Scots at the age of forty-two, and a portrait of Sir Hans Sloane, both on the south wall. In the Gold Ornament Room the portraits of Voltaire by Rousseau, and of William Courten (d. 1702), founder of the Sloane Collection, deserve notice.

Mention may also be made here of various sculptured portraits in the custody of the Department, though not placed in the Mediaeval Room. In the Entrance Hall are the statue of Shakespeare by Roubiliac, bequeathed by David Garrick, busts of the Duke of Marlborough (by Rysbraeck), and of Lord Chesterfield. Over the Wall-Cases in the Glass and Ceramic Room are thirteen

busts modelled in clay by Roubiliac and presented in 1762 by Dr. Maty. They include representations of Shakespeare, Milton, Newton, Cromwell, and Charles I.

POSY RINGS. *See* p. 177.

POTTERY. *See Guide to English Pottery and Porcelain.*

POUCHES.

Pouches and purses were worn attached to the girdle and were known by various names (*gibecières, gypcières* anglicized into

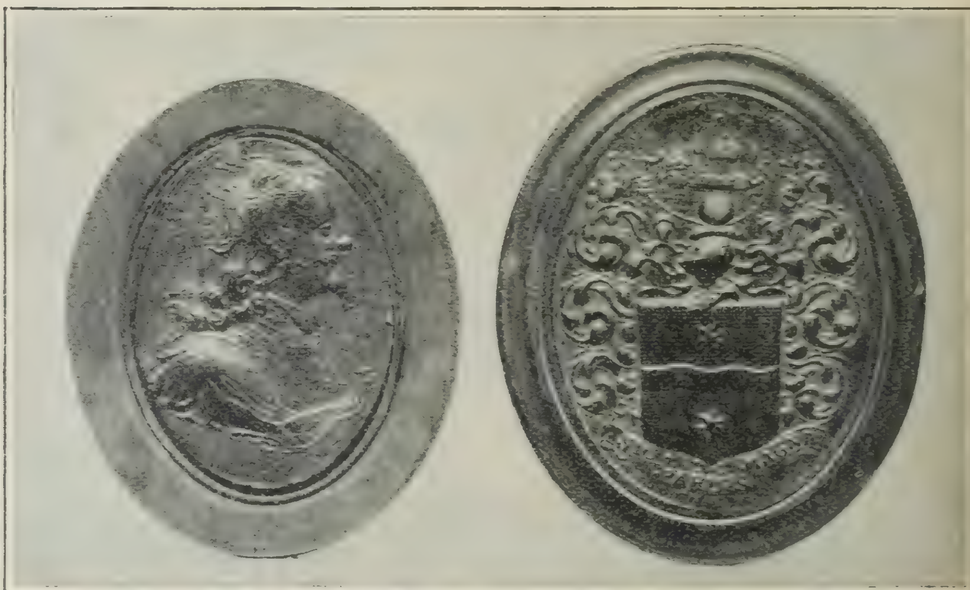


FIG. 173.—Pressed horn boxes, with bust of Charles I and arms of Sir Francis Drake.

gypsires, aumonières, escarcelles, &c.). They were pockets of stuff often richly embroidered, and their metal frames were frequently nielloed, gilded, or damascened. In the fourteenth and fifteenth centuries they often bore religious inscriptions, of which *Ave Maria gracia plena*, &c., is perhaps the most frequent (example in Table-Case B).

PRESSED HORN.

The art of producing designs by pressing horn, first softened by heat, into a mould, was doubtless known in mediaeval times, but it chiefly flourished in the seventeenth and eighteenth centuries, especially in the earlier part of the latter century when snuff-boxes

came into general use. But some of the finest work was produced about a century earlier, examples of which are the medallions with portraits of Frederick Henry, Prince of Orange, and Amelia his wife, by John Osborn, an Englishman working at Amsterdam in 1626 (Table-Case H). The best-known artist of the eighteenth century who worked in England was John O'Brisset or Obrisset. His works, many of which may be seen in the collection, range, as the dated examples show, from 1705 to 1727, snuff-boxes forming no inconsiderable proportion of them. Among his subjects were



FIG. 174.—Enamelled pyx, Limoges, thirteenth century.

both religious and mythological scenes, but he also excelled in portraits, which were not always those of contemporaries, as the popular bust of Charles I sufficiently proves (fig. 173). This anachronism is perhaps to be explained by supposing Stuart portraits to have been in demand among the Jacobites of Obrisset's day. Another curious anachronism in the ornamentation of these boxes is the frequent occurrence of the arms and crest of Sir Francis Drake, the popularity of which may have some connexion with the great navigator's share in introducing the use of tobacco into England (fig. 173).

It may be mentioned that the Japanese have long been familiar with the art of pressing horn, and netsukés made in this manner may be seen in Case **N** in the Asiatic Saloon.

PYXES.

A pyx (der. Gr. πυξίς, a box of boxwood) was in classical times at first of that material, but afterwards of ivory or other material, in which, as a rule, valuables were kept. When, in Christian times, a receptacle for relics or for the reserved sacrament was required, the classical pyx was adopted, and Christian subjects replaced the pagan figures carved on its sides (examples of Christian and pagan pyxes in ivory in Wall-Cases 35–36).

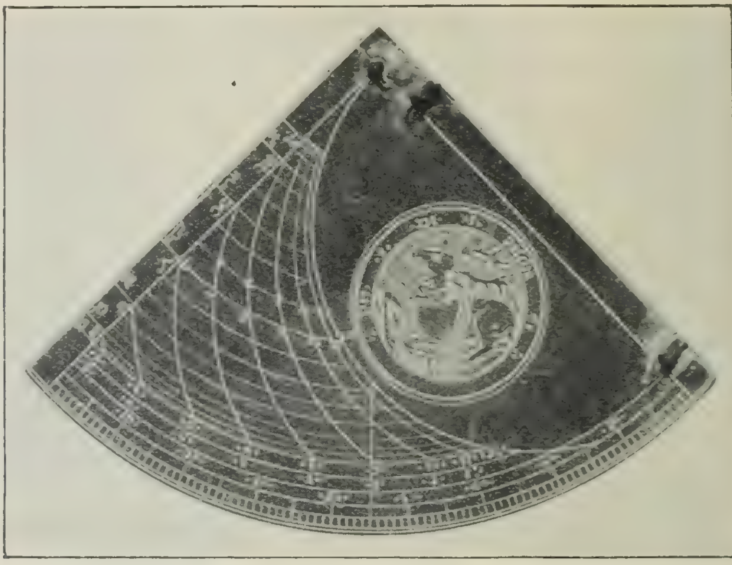


Fig. 175.—Quadrant with badge of Richard II.

Ivory pyxes of this kind have been preserved in several Western churches, and were imitated, though in the style of contemporary art, as late as the fourteenth century. But the most usual form of mediaeval pyx is a small cylindrical box with a conical top made in great numbers at Limoges in the thirteenth century (Wall-Cases 27–28 and fig. 174). Both the pyx and the ciborium were used to contain the reserved sacrament, and there was perhaps no clear line of demarcation before the Romanesque period. After that time the smaller vessel used for the viaticum was called a pyx, while the ciborium was a larger vessel always kept in the Church on or near the altar. (See **Ciborium.**)

QUADRANTS.

The *quadrant*, which is a quarter of a circle divided into 90 degrees, was used for the same purposes as the astrolabe and is of almost equal antiquity. The arc is marked with the months of the year, and days of the month, above which are the hours and azimuth lines, with part of the Ecliptic and horizon, &c. Fixed to one of the semi-diameters are two brass sights, and to the centre a thread with a plummet. When the sights are brought into line with the object, the position of the plumb-line over the graduated arc shows the altitude. The backs of quadrants were often engraved as dials or nocturnals: the quadrant of Richard II fig. 175) has a dial on the back.

RAPS. *See* p. 248.

RIMSTOCKS. *See* next page.

RING DIALS. *See* p. 104.

RINGS. *See* p. 172.

ROSARIES.

The method of numbering prayers by telling beads is probably of oriental origin, and is supposed to have been familiar to the Hindus long before the Christian Era. Rosaries are regularly used by Buddhists and Mahommedans, and examples from Japan and China may be seen in the Buddhist Room. The use of the rosary by Christians does not appear to go back to very early times, and there seems to be no certain authority for it before the eleventh century. The name rosary is later still. *Rosary beads* were often of semi-precious stone, or of the precious metals, often chased and enamelled. When of large size they were made to open, disclosing religious scenes; examples minutely carved in boxwood are in the Waddesdon Bequest (Nos. 235, &c.).

ROUNDELS, OR TRENCHERS.

Table-Case B, and Plate III.

These thin tablets of beech or sycamore wood, painted upon one side with floral designs enclosing rhymed mottoes, posies, maxims, or passages from Scripture, were chiefly used in the Elizabethan period, but continued to be made during the first

quarter of the seventeenth century. Perhaps the fruit was sometimes placed on the plain side, and the trencher reversed on the conclusion of dessert. Or the painted surface may have been covered with a napkin on which the fruit was placed, for it is unlikely that these highly decorated and rimless discs were actually employed as plates for fruit or sweetmeats. The mottoes were often susceptible of a personal application, and they probably served to amuse the company at table. This twofold use of the roundels is indicated by several passages from contemporary writers. Thus John Heiwood in 1598 speaks of 'a thin trim trencher to serve folke at frute', while in Webster's *Northward Ho!* Doll says to Bellamont: 'I'll have you make twelve posies for a dozen of cheese trenchers.' Several sets of these trenchers are in existence in private and public collections. Fruit trenchers were not always round; some were rectangular, and a set of this type is in the Table-Case. Another may be seen in the Bodleian Library at Oxford.

RUNIC CALENDARS.

Table-Case B and Wall-Case 49.

These calendars, known in Norway as Primstaves (from *Prim*, the equivalent of the Golden Number), and in Denmark as Rimstocks (from *Rim*, a calendar, and *Stock*, a stick), take the forms of plain or sword-shaped staves, walking-sticks, oval rings, or tablets of wood or bone, on which the days of the year are represented by Runic characters and feasts and days emblematic of the seasons by symbolic signs. The nineteen golden numbers for finding the full moon are also inscribed in their places; and sometimes the signs of the Zodiac, the solar cycle, and the bissextiles are added. These staves vary in size from a few inches to nearly five feet. They are perpetual calendars, and were employed alike by literate and illiterate, remaining in use in parts of the Scandinavian area down to the early part of the nineteenth century. Their invention no doubt goes back to a very early time, but the oldest surviving examples are much later than the introduction of Christianity into the North in the tenth century, and the feasts which the symbols denote are those associated with the names of saints and sacred persons. Thus a sword marks the Conversion of St. Paul (Jan. 25), a cross, Holy Cross day (May 3), a gridiron, St. Lawrence's day (August 10), a goose, St. Martin's day (Nov. 11), a St. Andrew's cross, St. Andrew's day, and so on.

It will be remembered that the runic letters are developed, according to the more generally accepted theory, from the Latin alphabet, their angular character resulting from the need of

facilitating the work of carving in a hard medium (stone, wood, or metal). The earliest known runes date from the fourth century, and their appearance upon the calendars of the seventeenth century is due to a survival, as they had long been replaced by another alphabet for common use. The later Scandinavian calendars are without runes, and therefore resemble the Staffordshire clog almanacks (which see).

RUSHLIGHTS. *See* p. 132.

SALT-CELLARS.

Salt-cellars, commonly called salts, were conspicuous pieces of plate in the Middle Ages, and the Great Salt served to separate the part of the table occupied by the principal guests from that assigned to less important persons. In early times they often took fantastic forms, occasionally those of animals; but the examples which have survived fall into four main classes, the earliest dating from the close of the fifteenth century. Those belonging to the oldest class, which was in fashion till the middle of the sixteenth century, are constricted in the middle, and thus approximate to the form of an hour-glass: the fine example at New College, Oxford, dated A.D. 1493, has a conical cover terminating in a beautiful finial. In the middle of the sixteenth century salts were cylindrical or square, and the covers were often surmounted by small human figures, as in the case of the Elizabethan salt among the Regalia at the Tower of London: at the close of the century a bell-shaped type came into fashion for a short time, but was soon succeeded by a lower form, either circular or octagonal, expanding at top and bottom, and without a cover. Fine examples of all these types are in the possession of Colleges, Corporations, and City Companies.

The above salts are all ornamental objects, not intended to contain the salt for individual use. For this purpose smaller cellars were made, known as 'trencher salts', and placed near the trencher or plate of the guest. They are triangular, circular, or polygonal: a triangular German example of the sixteenth century is shown in the Waddesdon Bequest Room, Case L; an octagonal salt in Limoges painted enamel is in the Mediaeval Room, Wall-Case 31.

SCALES. *See* p. 268.

SCIENTIFIC INSTRUMENTS. *See* p. 103.

SCISSORS.

Scissors were in use throughout the Middle Ages, though some of the types appear to have resembled what we should now call pliers. By the beginning of the fifteenth century however representations show types approximating to those now in use, though actual scissors of mediaeval date are of great rarity. Small scissors of the seventeenth century are exhibited in the passage to the Gold Ornament Room, first Case on the left.

SEALS. *See* **MATRICES.**

SERGEANTS RINGS. *See* p. 179.

SHIELDS. *See* p. 63.

SHOE-HORNS.

These objects do not seem to have been used before the sixteenth century, to which the earliest literary references and actual shoe-horns belong. Some of the examples of the period of Elizabeth and James I are richly engraved with ornament and figure-subjects. The best of these date from about 1600, and the English examples are usually signed by Robert Mindum. An engraved shoe-horn is exhibited in Table-Case **B**.

SITULAE. *See* p. 153.

SKATES. *See* p. 72.

SNUFF.

The habit of taking snuff became common in the seventeenth century, and at first it was usual to carry a grater called a *rap* (i. e. rasp, from the same root as the French *râper*, to scrape or grate). Apparently snuff-takers used to carry about a roll of tobacco in order to grate small quantities into snuff, as required, believing that fresh grating was essential to good quality. The rap terminated at one end in a small spoon, and at the other in a little reserve-box for the snuff which entered it through an aperture closed by a sliding hatch. Later, the grater and the box were separated, the first being kept at home, the latter alone carried on the person. The finest raps were of carved ivory, usually of French origin and dating from the early part of the eighteenth century. The whole of that century was the great period of the snuff-box, which was often of the most valuable

materials and sumptuously decorated. Such boxes were often given as presents by sovereigns, and an example in the Gold Ornament Room (Case W) with the portrait of Napoleon I was given by him to the Hon. Mrs. Damer.

SNUFFERS.

Snuffers must have been in regular use for the large and thick-wicked candles of the Middle Ages. But most of the old snuffers which have been preserved date from the seventeenth century and later, though the fine silver pair ornamented with enamels (Gold Ornament Room, Case W), formerly belonging to Cardinal Bainbridge, are of the time of Henry VIII. Snuffers of the seventeenth century are exhibited in Wall-Cases 31 and 32.

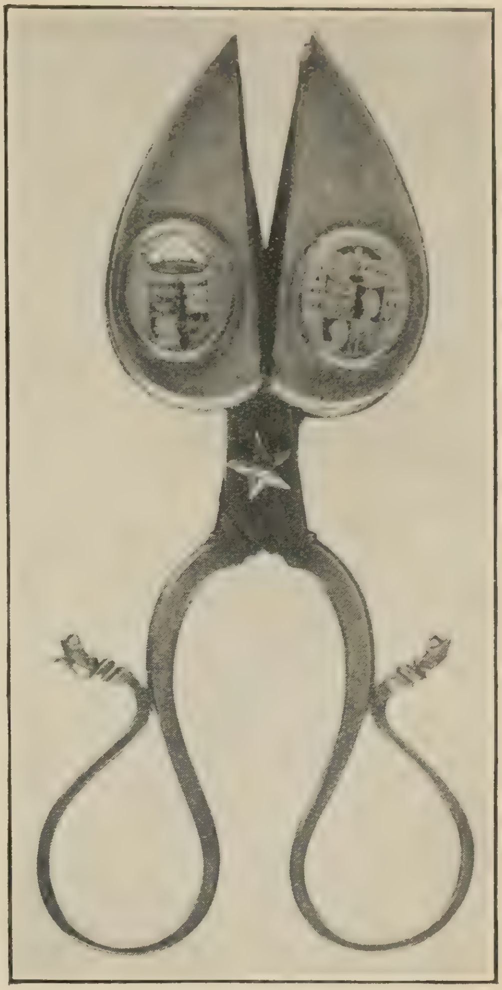


Fig. 176.—Enamelled silver snuffers of Cardinal Bainbridge.

SOLLERETS. *See* p. 62.

SPECTACLES.

The spectacles which were used in the Middle Ages were not made of glass, but of pebble (rock crystal or 'beryl'). They appear to have been generally known from the fourteenth century, when they were mounted somewhat in the manner of the modern folders, though without a spring. A miniature in a French manuscript of about 1380 shows spectacles of this kind.

SPOONS.

Spoons were comparatively rare before the fourteenth century. Even at the end of that century the inventory of Charles V of France shows that while the King possessed 280 cups of silver

and gold, he had only 66 spoons. Probably the early custom was to raise the vessel containing soup or broth directly to the lips; even in the sixteenth century some people preferred to do this, among others Montaigne, who has recorded the fact in his essays. Folding-spoons, carried in cuir-bouilli cases in the pocket, were used in the fifteenth century (a fine enamelled example in Table-Case B, plate XIII), but seem to have been most numerous a century later, when it was customary for every one to carry about his own spoon and fork.

A considerable number of English spoons have been preserved from mediaeval times. The earliest have a plain knop, an acorn, or diamond-point at the end of the handle. In the fifteenth century the head of the Virgin first appears in this position, and spoons so ornamented are called Maidenhead spoons: this type became common in the sixteenth century. Apostle spoons are very rare before A.D. 1500, but continued in fashion for a century and a half after this date: they were commonly used as christening presents. A complete set consisted of thirteen—the twelve Apostles, with either Our Lord or St. Paul, each with his attribute. Only two such sets are known, one in the possession of the Goldsmiths' Company, the other at Corpus Christi College, Cambridge. Apostle spoons in the old style were still being made about 1650, but the habit of presenting them at christenings was then on the wane, and this may account for their disappearance not long after that time. A type of spoon commonest in the last quarter of the sixteenth and the first quarter of the seventeenth century is that with the baluster and seal-headed end (fig. 177). All these early spoons have the crowned leopard's head stamped within the bowl, which is of the form described as fig-shaped. The baluster-type persisted down to the Restoration, when a new shape came into fashion. Spoons 'slipped in the stalk', i.e. with stems which look as if they had been cut through slantwise by a very sharp blade, are mentioned as early as 1500, but were in especial favour under the Commonwealth, whence they are sometimes described as Puritan spoons. At the Restoration the handle was made flat and broad, and cut at the end into a form thought to suggest a hind's foot, whence the term *pied de biche* spoons: the bowl was a broad oval (fig. 177). The next great change in the form of spoons took place about the reign of George I, when the bowl assumed a narrower elliptical form, while the handle was rounded off and turned up at the end, a rib or median line running down the middle: down the back of the bowl ran a raised tongue generally described as the 'rat's tail'. At the end of the reign of George II our present form came into use, with the end of the handle turned down instead of up; the bowl was narrower at the end than at the base, and the 'rat's tail' practically disappeared.



PLATE XIII. FLEMISH ENAMELLED SPOON AND CASE, ABOUT 1500.

[See p. 250.

The English kings possessed large numbers of valuable spoons. In the 'Jewel Book' of Henry VIII, in the Library of the Society of Antiquaries of London, there is mention of numerous gold spoons, many enriched with gems and enamels. The 'Coronation spoon' to be seen in the Regalia at the Tower of London deserves special mention. It is of silver-gilt; and though it was at one time thought to have been remade for the Coronation of Charles II,



FIG. 177.—English spoons. On the left acorn- and seal-headed; in the middle *pied de biche*; on the right, apostle and maidenhead spoons.

there seems good reason to suppose that it is really as old as the twelfth century. The character of the ornament certainly supports this view; and it has been suggested that it may have originally been the chalice-spoon (see below) used at the Coronation of Henry III, for whom new regalia had to be made owing to the loss of the Crown jewels in the Wash. It is in any case a most important example of early English silversmith's work.

Allusion has already been made to the custom of carrying folding spoons with hinged handles. About the beginning of the sixteenth century the handles of spoons sometimes terminated in forks of two prongs, probably for picking up sweetmeats (example, Table-Case **B** and Waddesdon Bequest, No. 214).

Spoons of pewter and other base metal were made concurrently with those of silver, and conform to many of their shapes. Attention may be drawn to the examples in the Table-Case, among which may be noted the spoon having at the end a lady's head with a head-dress of the time of Henry V, and that with a wheel at the end used by a cook for cutting pastry.

Types of Roman and Byzantine and Anglo-Saxon spoons may be seen in the Central Saloon (Table-Case **B**), in the Christian



FIG. 178.—Hilt of State-sword of Edward Prince of Wales and Earl of Chester.

Room (Wall-Cases 4–10), and in the Anglo-Saxon Room (Table-Case **H**). In the Ethnographical Gallery are exhibited various spoons of primitive peoples made of such materials as wood, shell, coconut-shell, &c. In connexion with these it may be recalled that the word 'spoon' is derived from the Anglo-Saxon *spon*, a chip, showing that spoons were commonly made of wood in early times.

Spoons were used in the Church for several purposes. One type pierced like a colander served to strain the wine when poured out of the cruets; another to take the wafers for the mass out of the ciborium; a third of small size, to receive the water to be

mixed with the wine in the chalice; a fourth to transfer the grains of incense from the navette to the censer. The Waddesdon Bequest contains a magnificent example of the incense-spoon (Case **J**, No. 209).

STATE SWORDS.

The sword of state as a symbol of power and authority has been continuously associated with the monarchs of England from the coronation of Æthelred in 978. Since the coronation of Richard I in 1189, three swords in addition to the sword of state have been carried by peers in the coronation procession, the privilege of bearing them being attached to certain earldoms. One of these swords, called the sword of mercy, or *curtana* because its point was blunted, was borne by the representative of the Earldom of Chester until that earldom was merged in the crown on the accession of Edward I. The supreme jurisdiction which these swords implied gave the bearers, who were usually of palatine rank, the privilege of having a sword borne before them within the bounds of their own lordships; and the two swords of the Earldom of Chester in Table-Case **A** were carried in this way. One of them is of the twelfth or thirteenth century, with a hilt of later date, the other (fig. 178) bears the arms, in enamel, of Edward, Prince of Wales and Earl of Chester (A. D. 1471–1483).

The privilege of having swords of state borne before them as emblems of special jurisdiction began to be accorded to mayors of certain cities in the latter half of the fourteenth century. Only seven cities received the right in that century, London being naturally the first. The extension of the privilege was only gradual, and at the present time thirty-one cities and towns possess the right. The city of Lincoln still has a sword of the fourteenth century, with a Solingen blade.

STEELYARDS. *See* p. 268.

STIRRUPS.

The earliest stirrups were doubtless loops of rope or leather, and the earliest metal stirrups probably imitated the form of the flexible loops which had preceded them. The date of their introduction is somewhat uncertain. On the famous Graeco-Scythian silver vase of the fourth century B. C. found at Nicopol in Southern Russia something depends from the saddle of a horse which looks like a stirrup-leather, but it is certain that the Greeks and the Romans either vaulted on their horses or were aided by mounting-stones such as Caius Gracchus is said to have had placed in the

streets of Rome. There is no literary evidence for the use of stirrups in Western Europe until about 600 A.D.; but the Byzantine Emperor Maurice Tiberius (582–602) mentions iron stirrups in his *Art of War*. The Sassanian Persians were in the habit of using stirrups, at a rather earlier date than this, if we may judge from the style of a Sassanian silver dish in the Museum of the Hermitage at St. Petersburg, where a mounted hunter is seen using them. Such facts lead to the supposition that they were of Asiatic invention, and the belief is strengthened by the occurrence of metal stirrups of a developed type in the dolmens of Japan, which ceased to be erected in the seventh century of our era. Further, there appear to be references to stirrups in Chinese literature as early as the close of the fifth century, and as metal examples have been found in Siberian graves, it is a probable hypothesis that the stirrup first came into Europe out of Asia, and that mounted Asiatic nomads brought it at least part of the way. Stirrups were used in the first half of the seventh century by the Teutonic peoples who settled in the Roman provinces, for Isidore of Seville, who died in the year 636, makes mention of them. Many early examples have been found in Hungary.

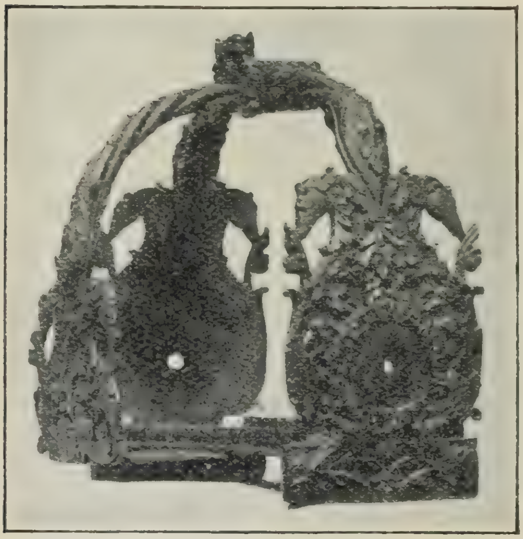


FIG. 179.—Stirrup, sixteenth century.

In the early Middle Ages stirrups were never massive, and were often approximately triangular in shape. In the fourteenth and fifteenth centuries the foot-plate and sides are apt to grow broader, and one side or both to assume a curved form at the base. The ornamentation of the sides by openwork also began; but the very elaborate stirrups decorated in this manner chiefly belong to the sixteenth century (fig. 179).

STYLUS. *See* p. 270.

SUN-DIALS. *See* p. 103.



Plate XIV. Portable Altar, Thirteenth Century.

[See p. 255.

SUPER-ALTARS (PORTABLE ALTARS).

The portable altars (*altare viaticum, portatile, gestatorium,* &c.), were usually about 20 inches long and rectangular, intended for use whenever churches were not accessible. After having been consecrated by a bishop, these altars were carried on voyages and campaigns, or on missionary expeditions into barbarous countries. We meet with them at a very early period. One was found in the tomb of St. Cuthbert, and is now at Durham; the Venerable Bede (A. D. 675–735) mentions that two missionaries in Friesland had such an altar with them; St. Wolfram, Bishop of Sens, is said to have carried one with him on a sea voyage; and William the Conqueror found a magnificent example among the treasures of Harold, which he presented to Battle Abbey. In the Middle Ages the privilege of possessing a portable altar was granted by the Popes to individuals or communities: thus Martin V granted the privilege to the English Merchants of the Staple at Calais. Most of the ancient portable altars have been destroyed, and considerably less than fifty are now preserved, the greater number in the treasuries of Rhenish churches. The early examples were no doubt comparatively plain, St. Cuthbert's being of oak overlaid with silver, but from the end of the tenth century they became more elaborate. The central part on which the chalice was placed was a slab of marble, porphyry, jasper, or other fine stone, usually rectangular. This was framed in a thick panel of wood, often of a rare kind such as cypress or ebony, which itself was commonly covered with plates of metal, often engraved or embossed, and enriched with enamel, niello, and gems. Beneath the stone was a place for relics of saints, the thickness of the altar varying from about an inch and a half to several inches. Dr. Rock considered that a distinction should be drawn between the ordinary portable altar and the more sumptuous examples with four feet, to which he confined the name super-altar. This was placed upon already-consecrated altars in great churches as a mark of additional reverence and as an honour to the celebrating bishop or prelate. Down to the Dissolution super-altars were numerous in England. The fine example in Wall-Case 30 (plate XIV) was a gift from an abbot named Thidericus, probably to the abbey of Scheida near Cologne, in the thirteenth century.

SURCOATS. *See* p. 62.

TABLES. *See* **GAMES**, p. 137.

TALISMANS. *See* p. 186.

TALLY-STICKS.

These sticks are of willow, box, or other seasoned wood, squared or flattened with a knife, and rent into two parts. A tally-stick served as a register of accounts or as a receipt, and when it was used, the sum of money representing the transaction was cut (*taillé*) upon both parts by means of notches, in such a way that if the two were put together each notch upon the one tallied exactly with the corresponding notch upon the other. Each of the higher denominations (e. g. pounds) was indicated by deep notches upon one surface; each of the lower denominations (shillings and pence) by smaller notches upon the opposite surface: the stick was usually rather flat than square, and the narrower surfaces or edges received the notches, while on the two broader faces the nature of the transaction was described in ink. One of the two halves was larger than the other and had a handle or undivided base: this

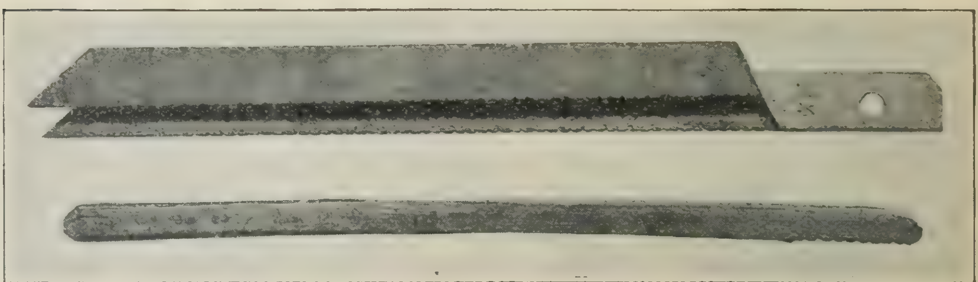


FIG. 180.—Above, modern hop-tally, as used in Kent; below, tally of the fourteenth century.

part was called the stalk or counterfoil. The smaller half was known as the leaf or foil. The way in which the two parts fitted together is shown in fig. 180.

This simple method of keeping accounts or giving receipts was of great importance in an age when writing was not a universal accomplishment; for it was easy even for the illiterate to verify the number of notches by simple enumeration, and see whether they coincided. It has been employed down to our own time in hop-gardens and elsewhere both in England and abroad; and though very primitive, is not without practical advantages. As long as the two notched halves remain apart, the two parties to the contract are still debtor and creditor; the union of the two in the hands of one party means that the account is closed and receipted. Tally-sticks were used by the British Exchequer down to the nineteenth century; but comparatively few of the large numbers once stored in the old Houses of Parliament escaped

from the fire in which the building was destroyed. In transactions between the Exchequer and individuals the latter were given the 'stalk', while the 'leaf' remained in official custody. Fig. 180 includes a stalk held by Radulph Spigurnell, Constable of Dover Castle and Warden of the Cinque Ports, dated October 7, 1368.

The ancient tallies, such as those of the fourteenth and fifteenth centuries exhibited in Table-Case B, were commonly of small size because the value of money was high. When the value of money diminished, sticks of greater length were required, because the purchasing power of a pound being less, more pounds were required in every transaction, and more notches upon the stick. The common use of tallies in the ordinary business of life is illustrated by literary references: Shakespeare uses them for a simile in his hundred and twenty-second sonnet.

Private tallies of early date are rare: an interesting example of 1367–1368, recording a payment by the reeve to the Lord of the Manor of Appleby Parva, in Leicestershire, is preserved, with the roll of the reeve's accounts, at that place.

TANKARDS. *See* p. 101.

TAU-CROSSES.

The word Tau is derived from the name of the Greek letter T which resembles a cross without the upper limb. The tau-cross was a staff with a top of this form, made of various materials, sometimes of carved ivory. Episcopal staves were often of this shape down to the twelfth century, as they still are in the Greek Church, and they were used concurrently with the crook or crozier. In later times the tau was regarded as the distinctive staff of abbots. Cantors and precentors also carried staves, which are thought to have been sometimes taus, though they are generally described as having a pommel at the top.

There is an exceedingly beautiful tau in the Collection (Table-Case F, plate X) found at Alcester in 1903 and probably made for the Abbey of Evesham; other examples are in the Victoria and Albert Museum.

TEXTILES AND NEEDLEWORK.

The large national collection of ancient textiles and embroideries is in the Victoria and Albert Museum, where fine mediaeval examples will be found. The British Museum has however a few pieces of very great interest, which are chiefly exhibited in a frame

on the wall by Case 4. They include figured silks from the robe and mitre-shaped head-dress of the Emperor Henry VI (d. 1197), discovered when his sarcophagus in the Cathedral of Palermo was opened towards the close of the eighteenth century; some beautiful fragments of embroidered vestments from the tomb of Walter de Cantelupe, Bishop of Worcester, 1236–1265; and a few smaller fragments from that of Bishop Hotham of Ely,



Fig. 181.—Panel of English needlework (*Opus Anglicanum*), about 1300.

1316–1337. In the design upon the garments of the Emperor we clearly see the oriental influence which affected the earliest products of the loom in Mediaeval Europe, especially in Sicily, where Saracenic art was highly developed and Byzantine weavers were introduced by the Norman princes. The scrolls on the vestments of Walter de Cantelupe may be compared with those on the tiles from Chertsey Abbey, which are of the same period.

Another object of remarkable interest is a small but characteristic piece of *Opus Anglicanum*, the embroidery for which this country was famous from the second half of the thirteenth century

(wall next Case 4 and fig. 181). The cope from the Monastery of Syon, near Isleworth, now in the Victoria and Albert Museum, is a magnificent specimen of this work, which was highly valued on the Continent. Fine examples are to be seen in Italy, France, and Spain, a beautiful cope being in the Cathedral of Toledo.

In Table-Case **A** are shown some fragments of early mediaeval figured silk, used as bags for seals, with embroidered purses and other objects of the seventeenth and eighteenth centuries.

THIMBLES.

Thimbles are mentioned as early as the twelfth century, and had been used from more ancient times. They were doubtless made of bone as well as of metal. Latten thimbles are referred to in the thirteenth century, but actual objects are difficult to date owing to the general similarity of known examples, apparently the more ancient specimens were less finely pitted on the outer surface than those of later date. A silver thimble of the time of Charles II is in Table-Case **B**.

TOBACCO-BOXES, PIPES, AND STOPPERS.

Tobacco was first brought to Europe by the Spaniards about the year 1560. It was introduced into France in 1561 by Jean Nicot, French Ambassador at Lisbon, after whom it was called Nicotiana: the name was subsequently corrupted into Nicotine, the word now used for the essential oil of the plant, but the Spanish word *tabaco* was ultimately adopted, with modifications, in all the languages of Europe. It is uncertain who really introduced tobacco-smoking into England, though Sir Walter Raleigh is traditionally credited with the introduction; at any rate by 1598 it was a common custom. Clay pipes are mentioned in that year, the bowls being very small, probably because the tobacco was exceedingly costly; it was not until the end of the seventeenth century that the size of the bowls became much larger. The examples which, on account of their small size, are presumably most ancient, are without dates, though some are stamped with initials or marks. Fig. 182 shows types of early clay tobacco-pipes, which are frequently dug up in London and in other towns, and have sometimes, on account of their small size, been called 'fairies' pipes'. Amesbury in Wiltshire and Broseley in Shropshire were both early centres of manufacture.

The oblong brass *tobacco-boxes*, of which such numbers exist in this country, were first introduced from Holland about the time of William and Mary, and many of them are engraved with scriptural and other subjects with inscriptions in Dutch. Later

in the eighteenth century they were made in England, and commonly ornamented with embossed subjects, portraits of the popular hero Frederick the Great being especially numerous (examples in Table-Case **H**, fig. 183). *Tobacco-stoppers* of the seventeenth and eighteenth centuries with human figures at their butts,

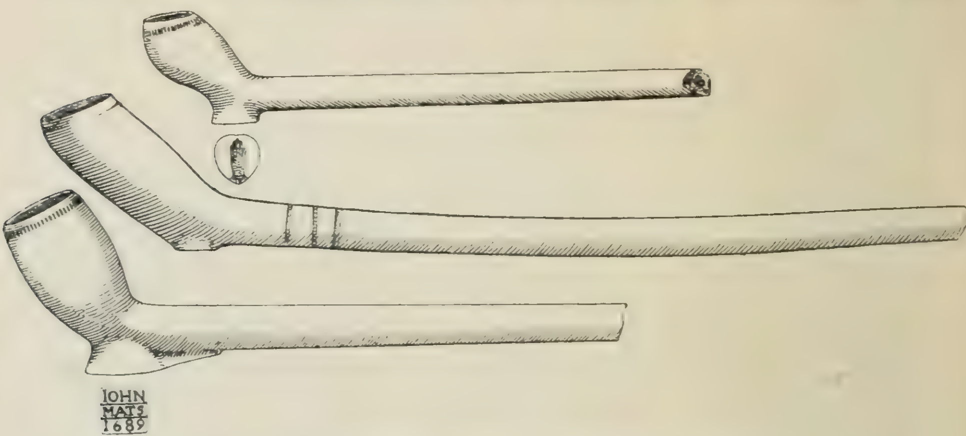


FIG. 182.—Clay tobacco-pipes, seventeenth century.

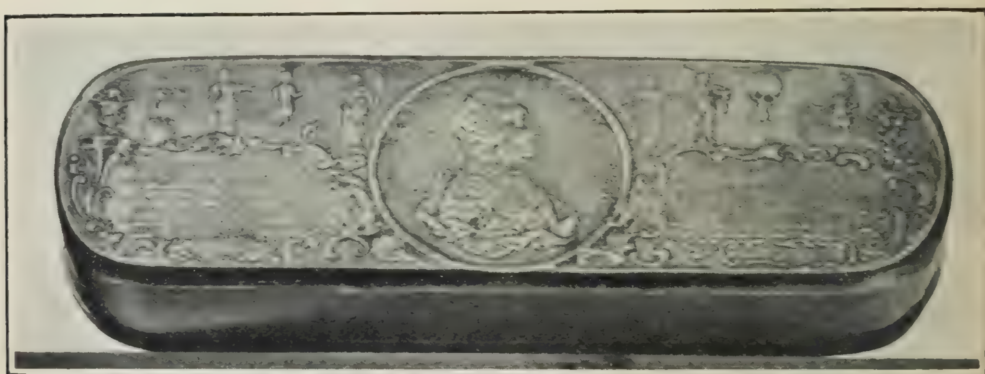


FIG. 183.—Brass tobacco-box of the eighteenth century, with portrait of Frederick the Great.

generally either carved in wood or cast in brass, have been preserved in considerable numbers (fig. 184); they were sometimes combined with finger-rings, in much the same manner as the private keys of the Romans.

TRENCHERS. *See* p. 245.

UNICORNS' HORNS.

The narwhal's tusk was commonly described as a unicorn's horn down to the seventeenth century. Among the effects of

Henry VIII were several walking-sticks of 'unicorn's horn', and an example carved with religious subjects, Flemish work of the early seventeenth century, is used as the staff of a processional cross in the Cathedral Church of Chester.

UTENSILS, DOMESTIC.

Mediaeval domestic utensils deserve further investigation than they usually receive, but they are much scattered, and even those



Fig. 184.—Tobacco-stoppers, seventeenth and eighteenth centuries.

made of metal have only survived in comparatively small numbers. To these the following brief remarks must be confined, the reader being referred for fictile vessels to the *Guide to English Pottery and Porcelain.* In Alexander Neckam's *De utensilibus,* dating from the end of the twelfth century, a description of the contents of a kitchen will be found; the names of various vessels are mentioned by Jean de Garlande who wrote about 1300; while

further information is furnished by wills, accounts, and other documents. From such sources and from representations in art we may gather that mortars, cauldrons, large metal spoons, gridirons, basins, and pans of various kinds were in constant requisition, and that many were made of iron. Few of the utensils in the collection go back to the early periods, but the tripod cauldrons above the wall-cases and the mediaeval skillets (fig. 188) deserve notice; the seventeenth-century skillets (Wall-Case 18 and fig. 7) are probably survivals of earlier types.



FIG. 185.—English bronze jug, time of Richard II, found in Kumasi.

Most metal vessels were made of *latten* (Fr. *laiton*), an alloy of copper and zinc, not copper and tin, and therefore strictly a brass; but there can be little doubt that the term latten came to be loosely used, and that a very large proportion of the objects so described were composed of copper and tin, and were therefore of a true bronze. The ewers, basins, jugs, mortars, purse-frames, and other objects commonly made in this metal were doubtless produced in every country, and most of them did not require any great capacity in the maker. But several very fine pieces of work which have survived the common destruction show that men as skilful as the bell-founders turned their attention to domestic vessels. An example of this is the superb English bronze jug with inscriptions and badges in relief, exhibited in Case 11 (fig. 185). This jug, which dates from the time of Richard II, somehow or other found its way to the Kingdom of Ashanti, on the Gold Coast, where it was discovered during the British Expedition of 1896. The type of vessel on three feet, with spout and handle, of which examples are shown in the same case, was a popular mediaeval form; a seal of Sandre of Gloucester (Table-Case D), dating from

the latter part of the thirteenth century, shows such a pot; and there exist other examples of the same period or a little later bearing coats of arms and raised inscriptions with the owners' names, or with the words *venez laver*. The latter inscription shows that one use of these vessels was for washing the hands, a supposition confirmed by a miniature of the *Roman de la Rose* in the Library at Brussels, where a man is seen drying his hands near a basin, while a tripod ewer hangs from a hook above. The ewers in the shape of



FIG. 186.—Bronze ewer in form of a mounted man, fourteenth century.

animals, chiefly lions, or equestrian figures (figs. 153 and 186) are always conspicuous in collections of early metal-work. They chiefly belong to the thirteenth and fourteenth centuries, and the equestrian type was sometimes reproduced in contemporary pottery: from the fact that they were used to pour water over the hands at meals, these vessels are commonly known as *aquamaniles*. By the beginning of the fifteenth century, Dinant, near Liège, in Belgium, had become so famous for its work in latten that the word *Dinanderie* was generally used to express the products of its industry. Perhaps the occurrence of zinc round Liège led the founders of the Meuse to adopt brass instead of bronze for ordinary use, and

Dinant and the neighbouring town of Bouvignes had been rivals in working metal from the thirteenth century. The *dinanderie*



FIG. 187.—Bronze mortars, sixteenth and seventeenth centuries.



FIG. 188.—Bronze skillets: that on the right, seventeenth century; that on the left of earthenware.

of the Low Countries was freely exported to other kingdoms, and after the destruction of Dinant by Philippe le Bon in 1466 many

workmen emigrated, some of them coming over to England. The industry was not confined to one region, and in the fifteenth century other towns in Belgium, France, and Germany had attained celebrity. Bas-reliefs, statuettes, candlesticks, &c., were now made in great numbers, and the production continued during the next century. The bronze mortars (Wall-Cases 19–20, fig. 187) dating from the sixteenth to the eighteenth century were chiefly used in the kitchen, as may be seen from representations in Dutch and other pictures, for instance Velazquez' 'Christ in the house of Martha' in the National Gallery.

(See also **Knives, Spoons, Forks,** &c.)

VERRE ÉGLOMISÉ. *See* p. 145.

VERVELS. *See* p. 135.

WAFERING-IRONS.

These were used throughout the Middle Ages for making thin cakes baked in the irons upon the embers. Their use has continued down to modern times, and they served to make the gift-cakes baked on 'Mothering Sunday' (at Mid-Lent) which are considered to be survivals of the offerings made in pre-Reformation times on the altar of the Mother Church upon that day. Though sacred devices are frequent upon ancient examples, it does not follow that they were intended for any other than secular purposes. A large pair with the lion of St. Mark is exhibited in Wall-Case 49.

WAGER-CUPS. *See* p. 239.

WALKING-STICKS.

Walking-sticks or canes, apart from the staves carried by pilgrims or officials, are rarely represented in art before the end of the fifteenth century. Henry VIII had a number of walking-sticks, one of which is seen in his portrait at Warwick Castle, and numerous Elizabethan portraits represent persons carrying them. Cane was used for the purpose as early as Henry VIII, but was especially characteristic of the eighteenth century.

WATCHES. *See* **CLOCKS.**

WAX PORTRAITS AND MASKS.

The art of modelling in wax was well known in antiquity: it was practised in Egypt, Greece, and Rome, and the masks of dead ancestors which the Roman patrician kept in his house were of this material. The art was in fact for many centuries concerned with the production of effigies of the dead, intended to be carried in their funeral processions. This custom was in existence in Mediaeval Europe, continuing even after the Renaissance; and though the funeral effigies of royal personages preserved at Westminster are of other materials, that of Henry III, which has not

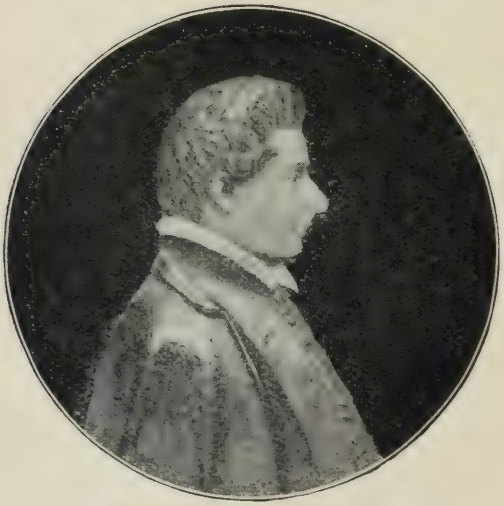


Fig. 189.—Wax portrait, German, sixteenth century.

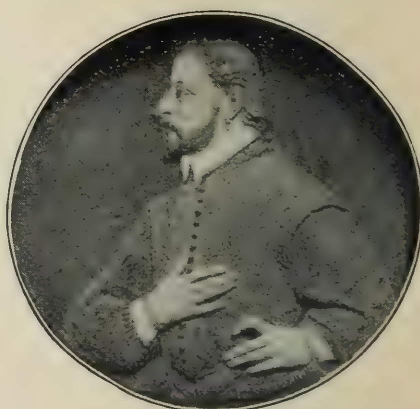


Fig. 190.—Wax portrait, German, (Nuremberg), 1596.

survived, is recorded to have been made of wax. Effigies were made of the French kings, the last so represented being Henri IV. In our own country the last king on whose bier an effigy was carried was James I.

Sculpture in wax became a fine art in Florence in the second half of the fifteenth century, and in the following three centuries a number of artists were engaged in the production of portraits, not only in Italy, but in France, Germany, and other countries. The best known of the earlier Italian modellers was the Florentine Orsino (1432–1488): other Italian names are Lombardi of Ferrara, Sozzino of Siena, and Abondio, who worked in Florence. A wax model for a medal of Michelangelo by Leone Leoni is exhibited in Table-Case F. In France the best artists in wax in the sixteenth century were François Clouet, who made the funeral effigies of the royal family, and the Danfryes, father and son. In the reign of Louis XIV Antoine Benoist (1632–1717) was the great portrait-

artist: he was invited to England by James II, where he executed many portraits. In Germany, where the wax portrait became the rival of the wood or honestone medallion in popularity, Lorenz Strauch and Wenceslas Müller of Nuremberg were well-known portrait-modellers. It is impossible to mention all the later artists in various countries, but it may be noted that Flaxman modelled his famous medallions for Wedgwood in wax. In the eighteenth century the material was very frequently used for small reliefs on

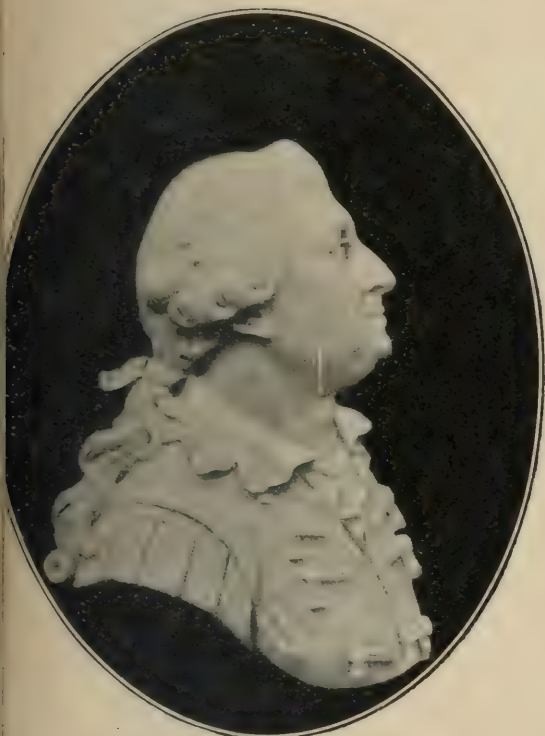


Fig. 191.—Wax portrait of David Garrick (d. 1779) by E. Burch, R.A.



Fig. 192.—Wax portrait of George IV.

snuff-boxes and other articles, but in the nineteenth its popularity declined.

The above paragraphs refer to finished works of art; but wax has constantly been used by sculptors and jewellers for making their models. Among the greater names of those who worked in this way may be mentioned Michelangelo, Verrocchio, Luca della Robbia, and Benvenuto Cellini. Several of Michelangelo's small models are to be seen at South Kensington, and one is in the Museum Collection (Table-Case **F**).

Mention may here be made of wax figures which can seldom claim any artistic merit, the *ex voto* which have been made from

very early times both in human and other forms, and the figures used in magic. The latter were rude representations of people whom it was desired to injure: they were stuck full of pins or gradually melted before the fire, in the belief that the persons whom they represented would in like manner be wounded and pine away. This practice, which in France has always been known as *envoûtement* (base Latin *involtare*, *invultare*, from *in* and *vultus*, a face), was well known in antiquity, and is mentioned, for example, by Plato. There is abundant evidence of its frequency through the Middle Ages and the sixteenth and seventeenth centuries, even great personages like Queen Elizabeth living in fear of it. In our own day it is still obscurely carried on, while it has numerous analogues among the superstitions of savage peoples.

Besides the portraits exhibited in Table-Case **F** and the *pietà* in Wall-Case 30, those interested should see the series in the Wallace Collection at Hertford House and in the Cluny Museum in Paris. In Wall-Case 44 is a wax death-mask which has been considered to represent Oliver Cromwell.

WEIGHTS AND MEASURES.

In the Middle Ages objects were weighed both upon steelyards and upon ordinary scales, which are levers with a central fulcrum and equal arms, from the ends of which pans are suspended by chains. It is obvious that in scales of the latter kind the weights used must be equal to the weight of the merchandise ; there must therefore be several of them and they must vary in size. In the case of the steelyard, a lever with unequal arms which was in common use among the Romans, a single counterpoise, sliding along the graduated longer arm, suffices to balance objects of various weights suspended from the shorter arm.

The basis of the old English weights and measures was the grain of corn, a given number of grains being equivalent to the penny sterling. In the reign of Henry VII it was enacted that the bushel should contain eight gallons of wheat, the gallon eight pounds, the pound twelve ounces Troy, the ounce twenty pennies sterling, the penny sterling 32 grains of dry wheat taken from the midst of the ear 'according to the old laws of this land'. This ratio of 32 grains to the penny had been established from Saxon times, the 32 wheat-grains being equivalent to 24 barley-corns, which are the grains of Troy measure and had been used as a unit instead of wheat-grains in parts of the Roman Empire. Avoirdupois weights were of more recent introduction than Troy, and were used for heavier objects from the time of Henry VIII. Standard vessels for measures of capacity were made by order of King Edgar and deposited at Winchester, whence the name

Winchester measure: the orginal bushel is still preserved in the Guildhall of that city. Above Wall-Case 26 may be seen a bushel of the time of Queen Elizabeth: other early bushels are in the Science collections at South Kensington. The old standard weights which all cities and towns were bound to keep have nearly all been lost on the frequent occasion of renewal; but Lancaster has a set dating from the time of Henry VII, and other early weights are at Derby and Cambridge. Of the English weights exhibited in Table-Case **D** the heavy spherical examples with shields of arms in relief are as early as the thirteenth century, and were probably counterpoises for steelyards: a smaller weight in the shape of a human head is also a counterpoise, somewhat recalling the weights in the shape of heads and busts used by the Romans. The flat weights with the royal arms were for ordinary scales, among the earliest being a lead example of Edward I: the larger flat bronze weights of half a stone belong to the Stuart and Georgian periods. The sets of avoirdupois weights fitting into each other like nests of boxes are not earlier than the sixteenth century. The small steelyard is probably of the seventeenth century.



Fig. 193.—Bronze weight of four ounces, fourteenth century.

The weights in Table-Case **C** are, like the seals in the same case, of foreign origin. The most interesting are those from the old provinces of Languedoc and Guienne in the South of France, which are flat and circular, with devices and legends on both sides, so that they have sometimes been called monetiform (fig. 33). They were locally known as *livrals* or *pesons*, and are pounds, half-pounds, and quarter-pounds, the earliest dating from the thirteenth century. The subjects upon the field are symbols, attributes, and heraldic devices indicating the authorities exercising jurisdiction in the provincial towns. There were sometimes more than one of these, secular (royal, baronial, or municipal) and ecclesiastical (episcopal or abbatial), in which case the weights of the place bear their several devices. There was no uniform standard in Mediaeval France, princes and barons having power to modify weights within their own territory at their pleasure.

The pound was in use everywhere, but it contained a different number of ounces in different places. Uniformity was not attained until the adoption of the metric system at the time of the French Revolution. Attention may also be drawn to the set of brass avoirdupois weights in a cuir-bouilli case, and to the wooden boxes containing small scales and sets of weights commonly used by money-changers in the seventeenth and eighteenth centuries. It may be noted in conclusion that though ancient weights exist in considerable numbers, mediaeval scales are of the utmost rarity. The pagan custom of interring personal property with the dead has had the result of preserving many more examples of the Roman and Saxon periods.

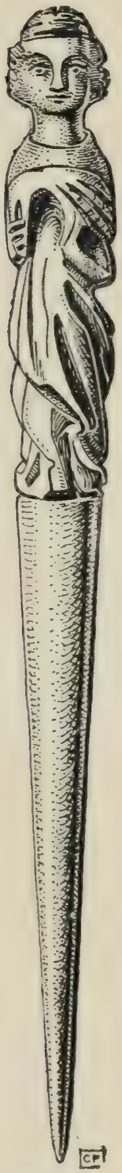


Fig. 194.—Bone stylus, fourteenth century.

WRITING.

Though ink was used throughout the Middle Ages, as at an earlier period, and paper, first introduced into Europe by the Arabs, was in fairly general use in the second half of the fourteenth century, tablets with a coating of wax were still found convenient for accounts and short memoranda: such tablets, commonly made of wood, had of course been in use in classical times. Though often having only two waxed surfaces on the inner sides of the two covers, mediaeval tablets were sometimes provided with several leaves; and a fine example of this kind, with eight leaves and in a cuir-bouilli case, is preserved in the Museum of Namur. The instrument used for writing was a sharp stylus (*greffe* or *pointel*) of metal, ivory, or bone, the bone and ivory examples being often finely carved at the thicker end (examples in Table-Case F, fig. 194). None of the carved ivory writing-tablets in the same Table-Case have preserved their coating of wax, but the large wooden tablet in Table-Case B, said to have been obtained in Switzerland, is also engraved with writing of the fifteenth century. The Department of MSS. possesses a tablet of accounts of about the year 1300 from the Abbey of Citeaux, while in the National Library at Paris there are tablets of the fourteenth century from Beauvais. Other examples are preserved in Germany and Italy. Wax tablets were used until comparatively recently in the fish-market at Rouen, and examples of these with the metal styli which accompanied them, are preserved in the *École des Chartes* at Paris.

For writing on parchment and paper pens were used, but their perishable material (reed or quill) has naturally led to their destruction. Quill pens appear to have been first mentioned in the seventh century and by the ninth century they were in very general use, though reed pens were not altogether abandoned. It may be noted that the split pen was used by the Romans: a metal example is shown in the Central Saloon (Table-Case **B**). The modern type of pencil was introduced just before the beginning of the nineteenth century, but in the Middle Ages pencils were small rods of lead resembling styli. Examples dating from the fourteenth and fifteenth centuries have been dredged from the Seine, but similar objects were in use considerably earlier.

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